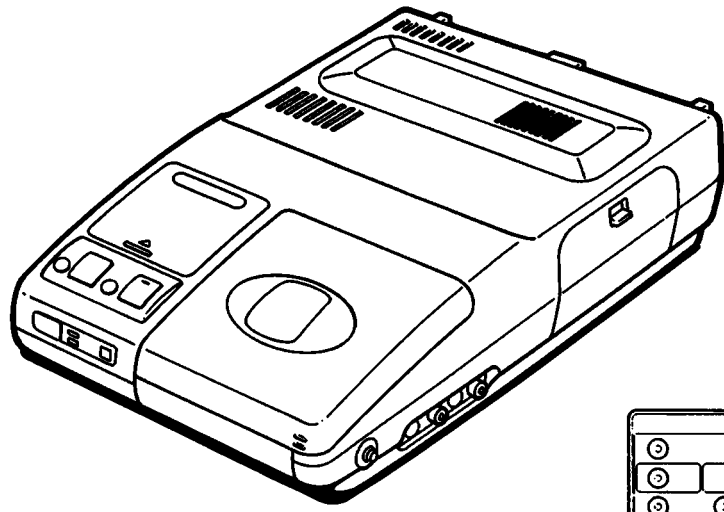
SONY

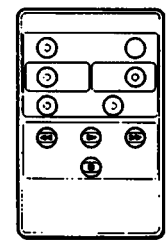
3-756-337-23 (1)

Color Video Printer

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.





Color Video Printer

CVP-M3

This PRINTER is designed to use CARTRIDGES bearing the VP trademark to yield quality prints.
VP and Design is a trademark used under license.

)wner's Record

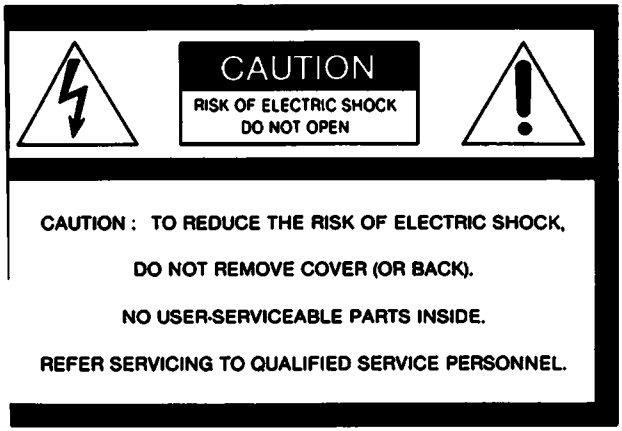
he model and serial numbers are located at the rear.
lecord these numbers in the space provided below. Refer to these umbers whenever you call upon your Sony dealer regarding this roduct.

lodel No. CVP-M3 Serial No. _____

WARNING

'o prevent fire or shock hazard, do not xpose the unit to rain or moisture.

) avoid electrical shock, do not open the cabinet. Refer servicing qualified personnel only.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

he graphical symbols are on the bottom enclosure.

WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

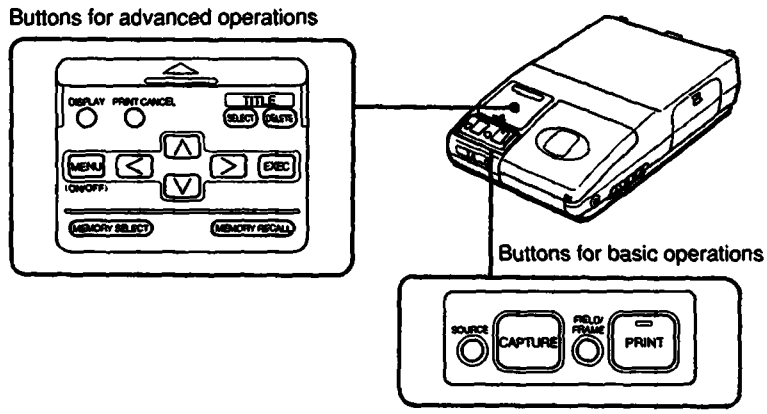
CAUTION
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Notice for the customers in Canada
This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

CAUTION
TV programs, films, video tapes and other materials may be copyrighted.
Unauthorized video printing of such materials may be contrary to the provisions of the copyright laws.

What is the Color Video Printer?

The CVP-M3 is a color video printer which stores the pictures played back on a video equipment or those broadcast on TV, and then prints the stored images. Basic operation is very simple. You can make a basic full-size printout using only the four buttons on the unit or the remote commander. Going beyond the basics, you can make a variety of printouts by changing the way to store the pictures (MEMORY MODE Setting) and the way to print the stored images (PRINT MODE Setting) according to the menus on the screen.



How to Use This Manual

This manual is comprised of the following five chapters:

Introduction

This chapter provides preliminary information for using the printer, such as supplied accessories, optional accessories, and precautions.

Setting Up

This chapter explains the steps involved in setting up the printer, such as connecting the printer to a monitor television and video equipment, using the supplied remote commander, and loading the video print cartridge and the print paper. Make sure to read this chapter before starting operation.

Making Basic Printouts

This chapter teaches you step by step how to make a full-size basic printout. It also explains the steps involved in printing TV broadcast pictures. If you are using the printer for the first time, read this chapter to get a basic idea of how to use it.

Going Beyond the Basics

This chapter explains the advanced operations which use the menus on the screen, such as how to make a variety of printouts, how to insert a date and a title, and how to adjust the picture quality of printouts. If you are familiar with the basic operations and want to use the variety of other functions this printer has, read the appropriate sections required in this chapter.

Other Information

This chapter gives the location and function of parts and controls, technical information on the printer, how to handle error messages, and how to deal with paper jams. Refer to this chapter when questions arise or problems occur.

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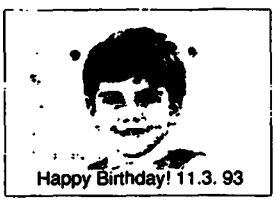

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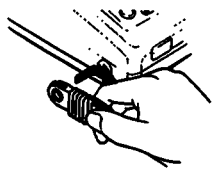
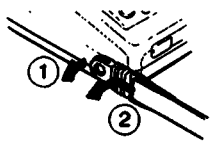
Supplied accessories

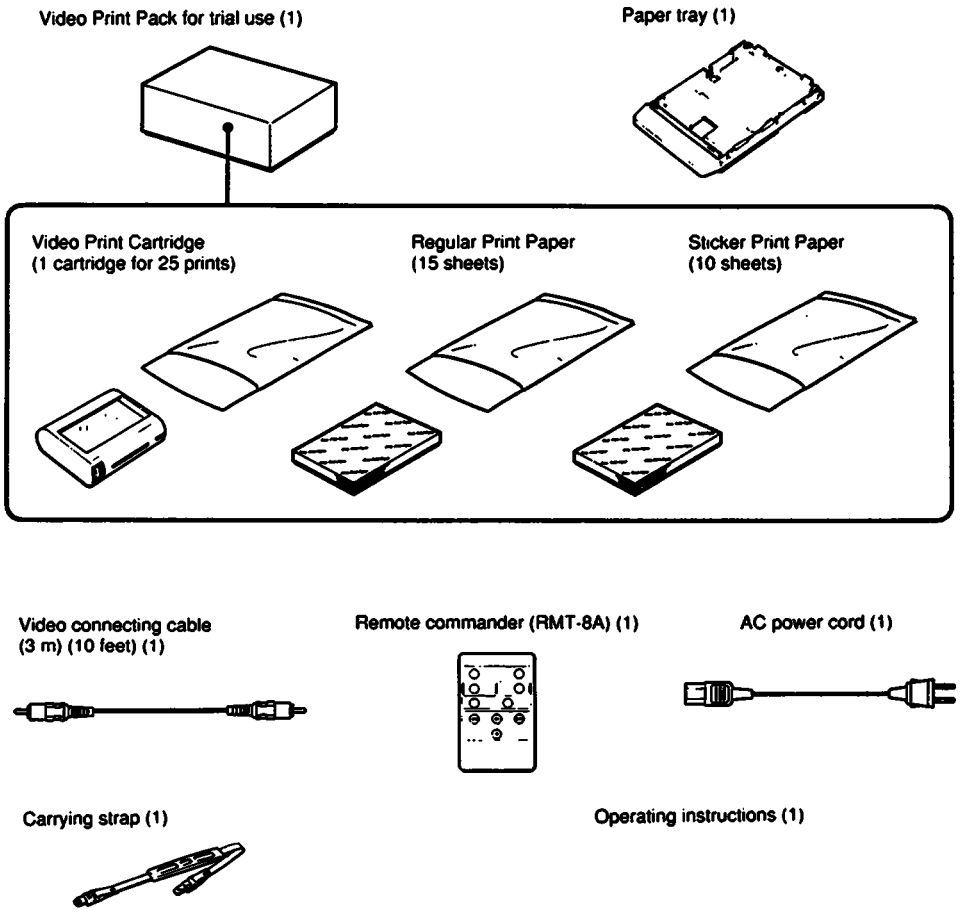
The printer is packed together with the following accessories. Check that nothing is missing from your package.

How to attach the supplied carrying strap
Attach the supplied carrying strap as illustrated to carry the unit.



To detach, lift up the end of the strap slightly as illustrated, and remove it, pushing it forward.





Optional accessories

The video print cartridge and the video print paper are not reusable. Besides regular video print paper, sticker print paper is available.
The S video connecting cable is also available.

This PRINTER is designed to use CARTRIDGES bearing the VP trademark to yield quality prints.

- **Video Print Pack VPM-P50ST**
  (One cartridge of ink ribbon for 50 prints and two 25-sheet packs of regular print paper)
- **Video Print Pack VPM-P100ST**
  (One cartridge of ink ribbon for 100 prints and four 25-sheet packs of regular print paper)
- **Video Print Pack VPM-P50WS**
  (One cartridge of ink ribbon for 50 prints and two 25-sheet packs of sticker print paper)
- **Video connecting cable VMC-1S (for video signals only)**
- **S video connecting cable YC-15V (for S video signals only)**
- **LCD color monitor XV-M30**

Notes

- **Use only the print cartridge and print paper packed in the same carton** in order to yield quality prints.
- Retain the bags which contained the video print paper and the video print cartridge. Be sure to store partially-used packs of print paper and cartridge in their original bags.

On safety

- Operate the printer on 120 V AC, 60 Hz only.
- Be careful not to set or drop any heavy objects on the power cord, or to damage the cord in any way. Never operate this printer with a damaged power cord.
- Should any solid object or liquid fall into the cabinet, unplug the printer and have it checked by qualified personnel before operating it any further.
- Never disassemble the printer.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- When the printer is not going to be used for an extended period, disconnect the power cord from the wall outlet.
- Do not handle the printer roughly.
- To reduce the risk of electric shock, always unplug the printer from electrical outlet before cleaning and servicing the printer.

On moisture condensation

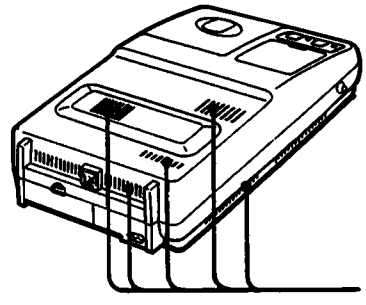
If the printer is brought directly from a cold location to warm place or placed in an extremely warm or humid room, moisture may condense inside the unit. In such cases the printer will probably not work properly and may even develop a fault if you persist in using it. If moisture condensation forms, turn off the power and do not use the printer for at least one hour.

On cleaning

Clean the cabinet, panel and controls with a soft dry cloth, or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent, such as alcohol or benzine, which may damage the finish.

On installation

- Avoid placing the unit in a location subject to:
  —vibration
  —high humidity
  —excessive dust
  —direct sunlight
  —extremely high or low temperatures
- Do not use electronic equipment near the unit. The unit will not work properly in electromagnetic fields.
- The unit is designed to operate horizontally. Never attempt to operate the printer in a tilted position.
  If the unit was placed on its side or with its top panel facing down, make sure to remove the paper tray and check that print paper is placed properly before starting operation.
- Do not place heavy objects on the printer.
- Leave enough room around the printer so that the ventilation holes are not blocked.
  Blocking these holes may cause internal heat build-up.



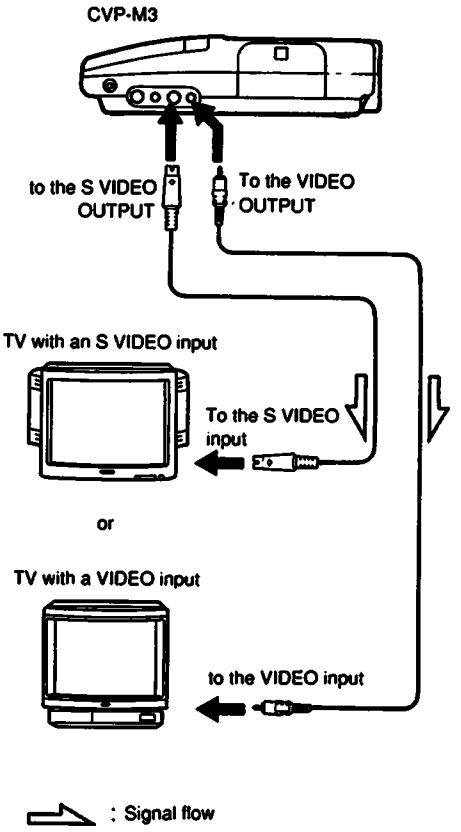
Connect the video source (camcorder, VCR, or MDP, etc.) and the video display (TV or monitor) to the printer. Use the devices equipped with VIDEO input/output connectors.
(You cannot use the devices which have only aerial connectors.)
Connect the necessary devices to the printer according to the following procedures.

Notes

- Turn off the power of the other equipment you will connect the printer to before making the connection.
- Do not connect the AC power cord of the printer to the wall outlet until all of the other connections are completed.
- For connection, also refer to the operating instructions of the other equipment you will connect the printer to.
- When using the twin-lead cable (flat) to connect the video equipment to the aerial, noise may be heard if you install the video device near the printer. Keep it away from the printer.

1 Connect the printer to the television/monitor.

Connect the VIDEO OUTPUT connector of the printer to the VIDEO input connector of TV, using the supplied video connecting cable.



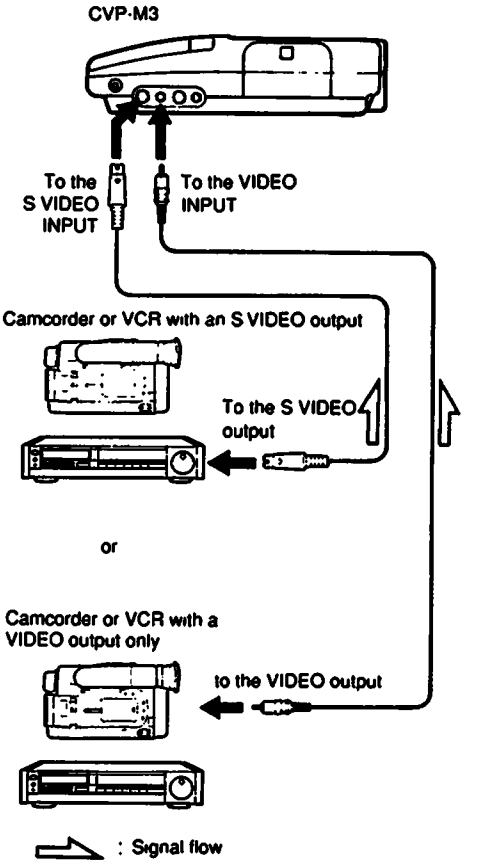
If you have a television with S VIDEO input/ output connectors, connect the S VIDEO OUTPUT connector of the printer to the S VIDEO input connector of the television, using the S video connecting cable YC-15V (not supplied).

Note

You cannot use a television which has aerial connectors only.

2 Connect the printer to the video equipment.

Connect the VIDEO INPUT connector of the printer to the VIDEO output connector of the video equipment.

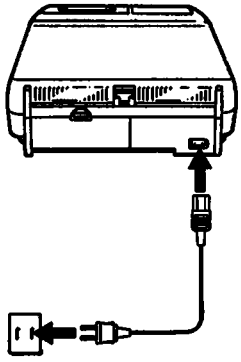

CVP-M3
To the S VIDEO INPUT
To the VIDEO INPUT
Camcorder or VCR with an S VIDEO output
To the S VIDEO output
or
Camcorder or VCR with a VIDEO output only
to the VIDEO output
: Signal flow

If you have video equipment with an S VIDEO output connector, connect the S VIDEO INPUT connector of the printer to the S VIDEO output connector of the video eqipment, using the S video connecting cable YC-15 (not supplied).

Note

You cannot use the video equipment with aerial connectors only.

3 Connect the supplied AC power cord to the AC IN jack of the printer and the wall outlet.



S VIDEO connectors and VIDEO connectors

The printer has both S VIDEO connectors for separate luminance (Y) and chrominance (C) signals and VIDEO connectors for composite NTSC video signals. When the video and television units that the printer will be connected to have both types of connectors, connect to the S VIDEO connectors, using the S video connecting cable YC-15V (not supplied). You can enjoy printouts with higher quality picture.

If you connect the S VIDEO OUTPUT connector of the printer to the VIDEO input connector of the video device, the printer will output video output signals automatically. If you connect the VIDEO INPUT connector of the printer to the S VIDEO output connector of the video device, the printer will input video input signals automatically.

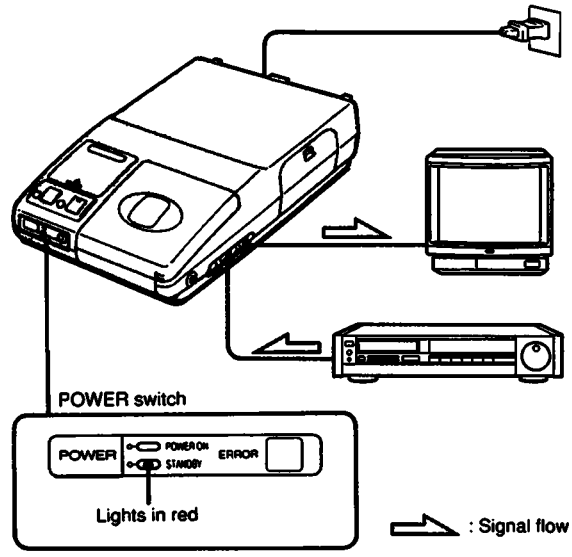
If you use both the S VIDEO and VIDEO INPUT connectors of the printer simultaneously, the input circuit will select the S VIDEO input signals automatically.

Even if you have no video equipment

You can print TV broadcast pictures if your TV has S VIDEO or VIDEO input/output connectors. For details, refer to "Printing TV Broadcast Pictures" on page 19.

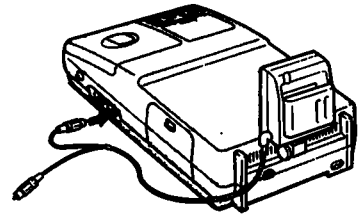
Watching video and TV after connecting to the printer

As long as you leave the supplied AC power cord connected to the AC In jack of the printer and the wall outlet, you can enjoy watching video and TV as usual, even if the printer itself has been turned off. Whenever the unit is connected to the AC power source, the POWER lamp lights in red. (The printer is in a standby mode.)
If you unplug the AC power cord from the wall outlet, you cannot watch video or TV.



Seeing pictures on LCD color monitor (not supplied)

Connect the LCD color monitor to the accessory shoe of the printer, and connect the video input connector of the monitor to the VIDEO OUTPUT connector of the printer.



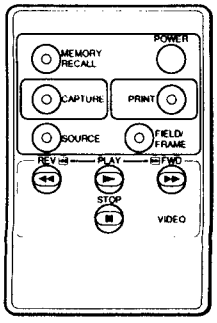
Note

Since the monitor screen is so small that you may not be able to judge if the picture is blurred or not. (See page 17.)

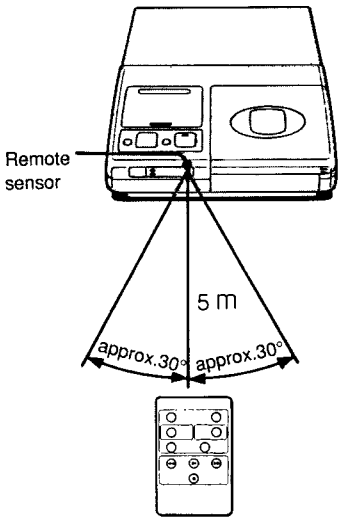
Function of the buttons on the remote commander

The supplied remote commander has the same basic operation buttons as the main unit. It also has some buttons to control the tape transport of Sony video equipment, which can be selected by the COMMAND MODE switch at the rear of the commander. For details, refer to "Location and Function of Parts and Controls" on page 47.

A lithium battery is already installed. If the operating range of the commander becomes noticeably short, replace the battery with a Sony CR2025 lithium battery.



Point the head of the remote commander toward the remote sensor on the printer. You can operate the printer with the remote commander within 5 meters (16 feet 5 inches) of the printer.



Notes

- Keep the remote sensor of the printer away from direct sunlight or the strong light of lighting equipment.
- Be careful that there is no obstacle between the printer and the remote commander.

How long is the battery life ?

In normal operation, the lithium battery will last for about one year.
(Its life span depends on how often the remote commander is used.)
If the operating range of the commander becomes noticeably short, replace the battery with a Sony CR2025 lithium battery. Use of batteries other than CR2025 may create a risk of fire or explosion.

Caution on lithium battery

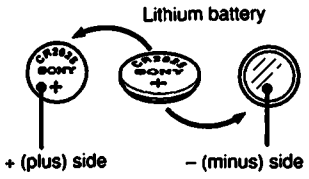
- Keep the lithium battery and the remote commander out of the reach of children.
- Should the battery be swallowed, consult a doctor immediately.
- Wipe the battery with a dry cloth to assure a good contact.
- Do not hold the battery with metallic tweezers as doing so may cause a short circuit.

WARNING

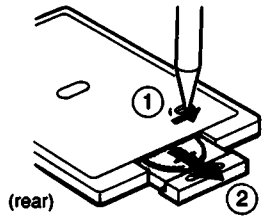
Battery may explode if mistreated.
Do not recharge, disassemble or dispose of in fire.

Replacing the lithium battery

Be sure to insert the battery with correct polarity.
If you insert it with wrong polarity, you cannot operate the remote commander.



1 Remove the lithium battery compartment at the rear of the remote commander.

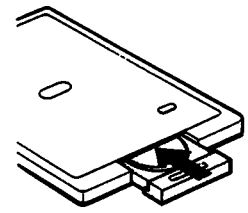


① While pressing the lock switch with a ball-point pen or other pointed object in the direction of the arrow,
② remove the lithium battery compartment.

2 Insert a new lithium battery (CR2025) in the battery compartment with the + (plus) side facing up.

Wipe the surface of the lithium battery carefully with a dry cloth.

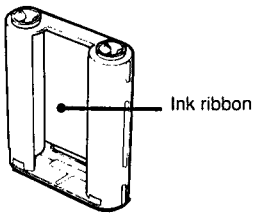
3 Install the battery compartment as before.



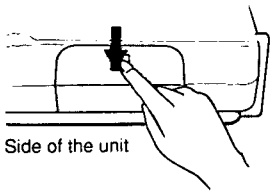
Load the video print cartridge with the VP mark according to the following procedures.
Use only the video print cartridge and the video print paper packed in the same carton.

If you load mismatched video print paper and video print cartridge, the error message "Print paper and ink ribbon are mismatched." appears on the screen and you cannot start operation.

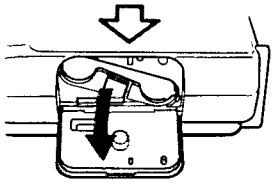
Note on handling video print cartridge
When you put the cartridge down, stand it as illustrated so that dust will not get on the ink ribbon. Do not touch the ink ribbon or place the cartridge in a dusty location. Fingerprints or dust on the ink ribbon may result in imperfect printing.



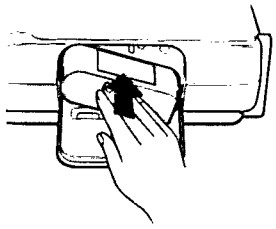
1 Open the cartridge compartment lid.

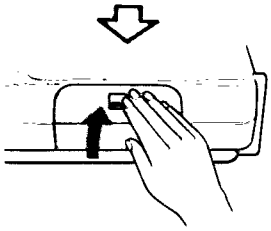


Open the lid while pulling down the tab.



2 Insert the video print cartridge firmly and close the cartridge compartment lid.





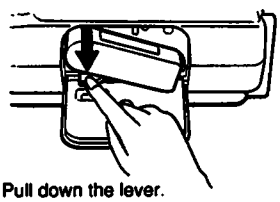
Close the lid

If the ink ribbon of the cartridge is slack, rewind to remove the slack, and then insert the cartridge. If you insert a cartridge with a slack ink ribbon, the ribbon may be damaged.

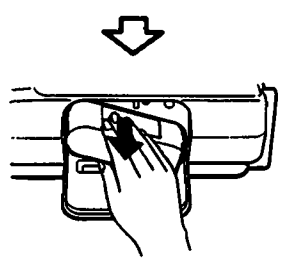
If the cartridge compartment lid will not close
Remove the cartridge, and then reinsert it.

Replacing the video print cartridge

You cannot reuse a cartridge which has been completely used. Replace the cartridge with a new one. If the completely used cartridge is still loaded in the unit, the error message "Out of ink ribbon please insert new cartridge." appears on the screen. Pull down the lever and remove the cartridge as illustrated.



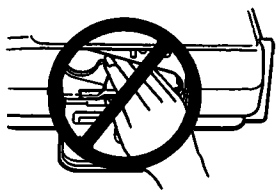
Pull down the lever.



Pull out the cartridge.

Caution

Never put your hand into the cartridge compartment. The thermal head reaches high temperatures, especially after repeated printing.

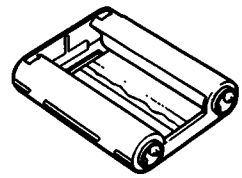


Notes on storing video print cartridges

- Avoid placing the cartridge in a location subject to:
  - —high temperatures
  - —high humidity
  - —excessive dust
  - —direct sunlight
- When you are going to store a partially-used cartridge for an extended period of time, store it in its original bag.

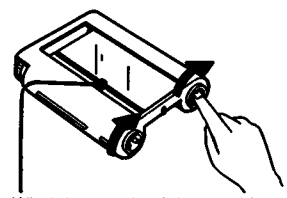
If your ink ribbon should tear

Repair the ribbon with transparent tape. There should be no problem with using the remaining portion of the ribbon.



When you use a partially-used video print cartridge

Wind the ink ribbon until the black bar appears on the left. Also, remove any slack.

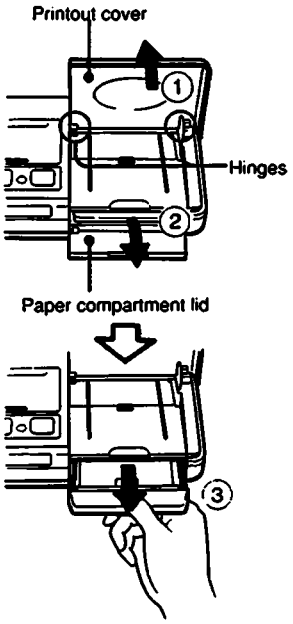


Wind the spools of the cartridge alternately as illustrated until a black bar extending full-width of the ribbon appears on the extreme left.

Load the video print paper according to the following procedures. Use only the video print paper and the video print cartridge packed in the same carton.

Note on handling the video print paper
Do not touch the printing surface (the side where nothing is printed). Do not place the print paper in a dusty location. Fingerprints or dust on the printing surface may result in imperfect printing. Use the print paper recommended for this printer only. If you use a different type of paper, the printer may not print properly or may cause problems.

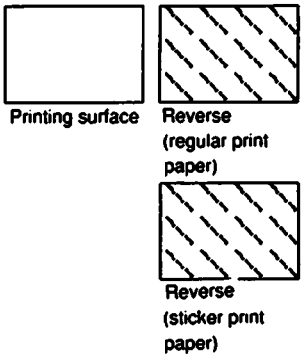
1 ① Open the printout cover, ② open the paper compartment lid and ③ remove the paper tray.



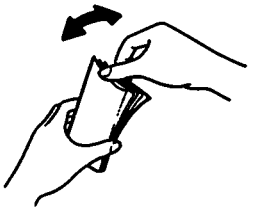
How to reattach the printout cover
If you open the printout cover forcibly or put force on the hinges, the printout cover may come off from the unit. In this case, fit the two hinges onto the pins from directly above to reattach the cover.
(If it is NOT done from directly above or too much force is put on the hinges, the hinges or the pins may be damaged.)

2 Insert the video print paper in the paper tray.

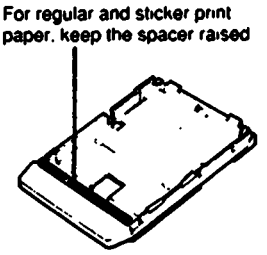
1 Determine which side is the printing surface.
For regular and sticker print paper, the printing surface is the shiny side where nothing is printed.



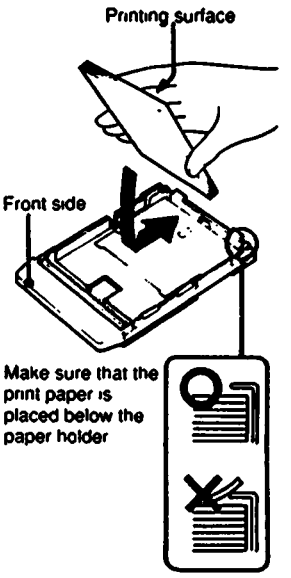
2 Ruffle the print paper.



3 Make sure that the tray spacer is lifted.
If you insert the regular print paper or the sticker print paper in the paper tray while the spacer is down and continue operations, paper jams may occur.



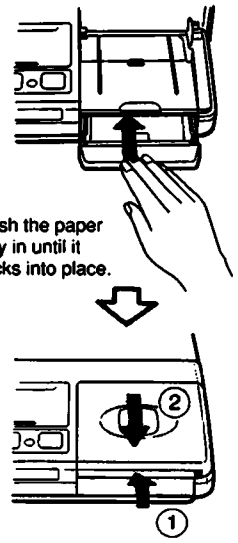
4 Check that the corners of the print paper are not bent, and then place the paper in the paper tray with the printing surface facing up.



Notes

- The paper tray holds up to 25 sheets.
  When you add paper to a partly-full tray, be careful that the total number of sheets does not exceed 25. If you exceed this limit, paper jams may occur.
- Do not place different types or sizes of paper in the tray at the same time. If you do, paper jams may occur.
- After you have carried or stood the printer on its side, check that the print paper is placed properly in the paper tray. Then start operation.
- Do not remove or insert the paper tray with the unit standing on one side or the other. If you do, malfunction may occur.
- Peel off the film of the sticker print paper after printing. If you peel it off before printing, it may cause paper jams or other troubles.

3 Slide the paper tray back into the printer, close the paper compartment lid, and close the printout cover.



Push the paper tray in until it clicks into place.

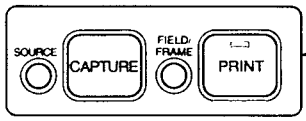
① Close the paper compartment lid first, and then ② close the printout cover.

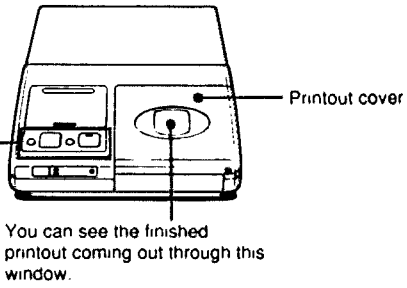
Notes on storing the video print paper

- Avoid placing the print paper in a location subject to:
  —high temperatures
  —high humidity
  —excessive dust
  —direct sunlight
- When you are going to store a partially-used pack of the print paper for an extended period of time, store it in its original bag.

Making Basic Printouts

Use the four buttons on the front top side of the unit for basic operations.





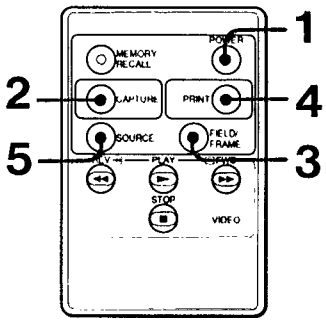
The following are the steps to make a full-size basic printout* of the pictures played back on the video equipment, using the four buttons on the front top side of the unit.

* Video print paper with the picture printed

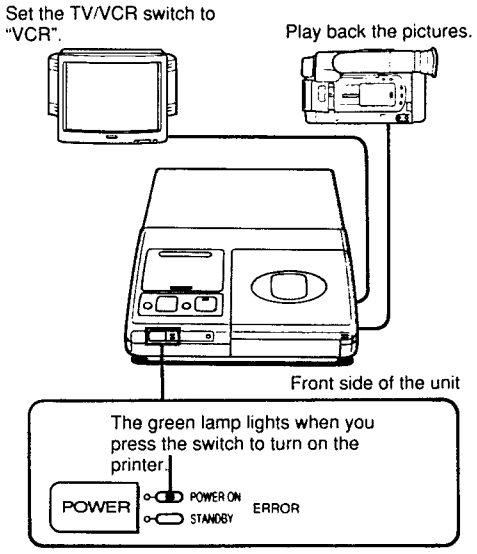
Store the image you want to print.
↓
Check whether the image you want to print is blurred or not on the screen.
↓
Not blurred. → (↓)
Blurred. → ↓ Select FIELD A or FIELD B mode. → (↓)
↓
Start printing.

Once you understand the operation explained in this section, you can do any basic operations of the printer. For printing from the TV, refer to "Printing TV Broadcast Pictures" on page 19.

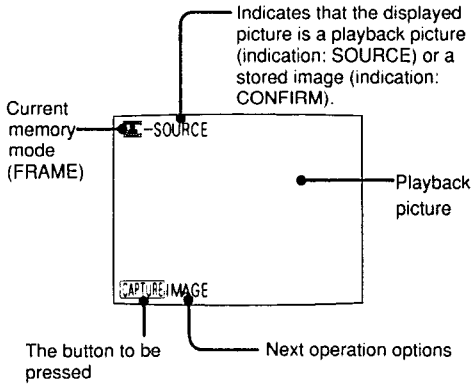
Remote commander



1 Turn on the power of the printer and the video equipment, and play back the pictures on the video equipment.


Set the TV/VCR switch to "VCR".
Play back the pictures.
Front side of the unit
The green lamp lights when you press the switch to turn on the printer.
POWER
POWER ON
STANDBY
ERROR

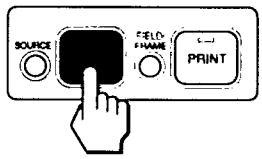
The pictures being played back on the video equipment appear on the screen.


Indicates that the displayed picture is a playback picture (indication: SOURCE) or a stored image (indication: CONFIRM).
Current memory mode (FRAME)
-SOURCE
Playback picture
CAPTURE IMAGE
The button to be pressed
Next operation options

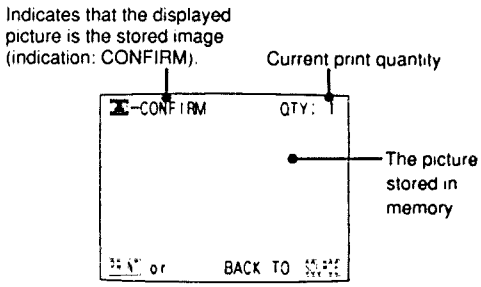
Note

If the video print cartridge and the video print paper are not loaded in the printer when you turn it on, the error messages, "Please insert Video Print Cartridge." and "Please place Video Print Paper in tray." appear on the screen one after another. Load the cartridge and paper according to the procedures shown in the chapter "Setting Up" on pages 12 – 15.

2 When the image you want to print appears on the screen*, press the CAPTURE button to store it in memory.



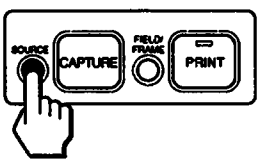
The image stored in memory appears on the screen so that you can confirm the image for printing.



* You can store a still picture created by pressing the pause button on the VCR. However, the quality of a still picture is inferior to that of a picture being played back on the VCR: consequently, the quality of the printout may be rather poor. Therefore, we recommend storing the playback picture whenever possible.

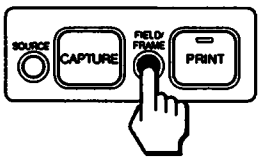
Confirming and error beeps
When you press a button on the main unit or remote commander, a beep sounds to show that you have done an expected step of the operation. If you have done an unacceptable step, repeated beeps sound to show that the printer rejected your operation. Repeat the operation carefully, referring to the steps shown in this manual.

To change the image stored in memory
Press the SOURCE button.



The stored image disappears and the playback picture returns to the screen. When the image you want to print appears, press the CAPTURE button again to store a new image. The previous image in memory is replaced with the new one.

3 If the stored image is blurred, press the FIELD/FRAME button to select the FIELD A or FIELD B mode. (If the stored image is not blurred, proceed to step 4.)



Each time you press the FIELD/FRAME button, the indication on the screen changes in the order of FRAME → FIELD A → FIELD B → FRAME. Select the FRAME/FIELD mode, checking which mode eliminates the blur most.

Image in FRAME mode (blurred)

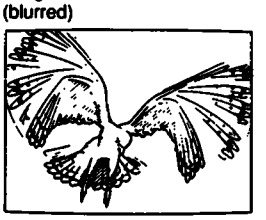


Image in FIELD A mode

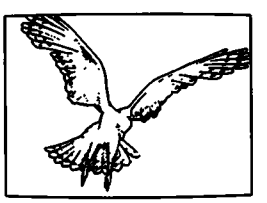
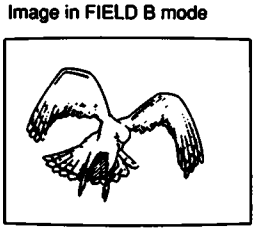


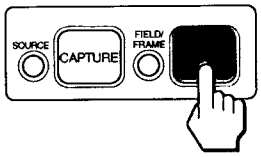
Image in FIELD B mode



What blurs the stored image ?
The stored image is blurred because the motion of the image is so fast that the image changes while the printer is storing the image in the FRAME mode. If you print this image, the picture on the printout will also be blurred. To eliminate the blur, press the FIELD/FRAME button to select the FIELD A or FIELD B mode, checking which mode eliminates the blur more. The picture quality, however, may become coarse when printed in the FIELD mode. When the stored image is not blurred, we recommend you to print in the FRAME mode. For details, refer to "FRAME mode and FIELD mode (About Memory (Capture) Mode)" on page 45.

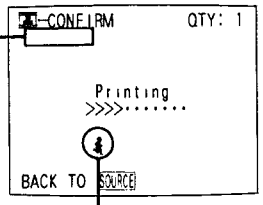
(to be continued)

4 Press the PRINT button.



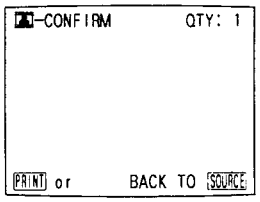
Wait about 60 seconds for the printout (regular and sticker print paper) to emerge from the paper outlet. Open the printout cover and take it out.

If you print in the FIELD mode, FIELD A or FIELD B appears here.



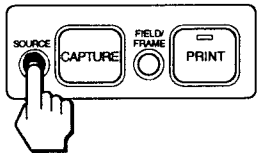
A running figure appears while printing process proceeds.

When the printing is over, the following indications reappear on the screen.



To see the playback picture during printing

Press the SOURCE button to display the playback picture. (You cannot store a new image until the printing is finished.)

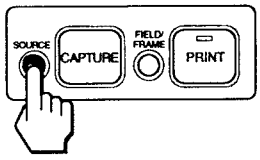


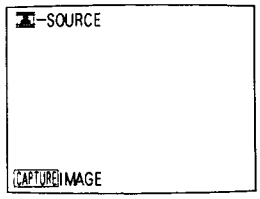
Notes

- **To avoid malfunction, do not unplug the power cord from the wall outlet during printing or other operation.** If you should turn off the printer during printing, it will complete the printing in process and then turn off automatically.
- **If you turn off the unit, the stored image is cancelled.**
- Do not open the hatches for checking a paper jam under the printout cover and on the bottom panel during printing.
- As long as an error message is displayed on the screen, you cannot start printing. Refer to "Error Messages" on page 48.
- **Do not leave more than 25 printouts on the paper outlet.**
- A black line may appear on the right or left end of a printout although no such line appears on the screen. This is due to a distortion in the video signals and not due to some trouble with the printer.

5 Press the SOURCE button.

The playback picture reappears.





Notes on preserving your printouts

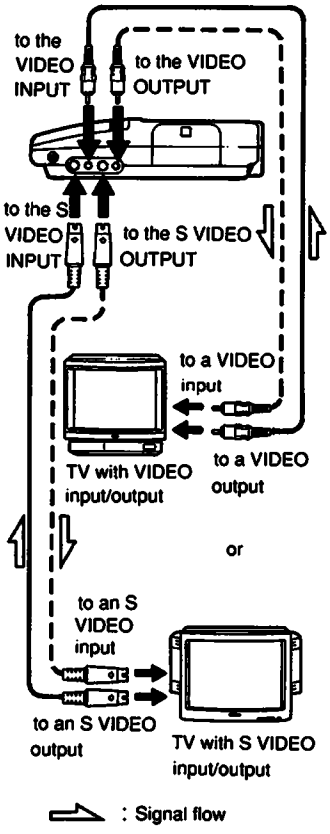
- Do not stick cellophane tape or leave plastic erasers on a printout. Also avoid putting a printout under a plastic desk mat. The color may stick to the plastic surface.
- Be careful not to spill volatile organic solvents such as alcohol onto the printouts. If you do, picture on the printout may be discolored.
- To avoid degradation of the color, do not place a printout in locations subject to:
  —high temperatures
  —high humidity
  —direct sunlight
  —excessive dust

Making Basic Printouts

You can print TV broadcast pictures by connecting the printer to a TV with the VIDEO input/ output connectors.

1 Connect the printer to the TV.

Connect the VIDEO INPUT/ OUTPUT connectors of the printer to the VIDEO input/ output connectors of the TV as illustrated, using the supplied video connecting cable.

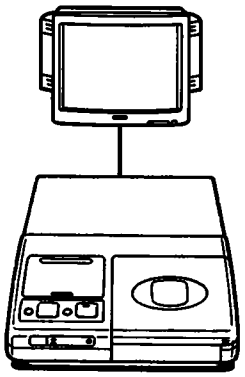

to the VIDEO INPUT
to the VIDEO OUTPUT
to the S VIDEO INPUT
to the S VIDEO OUTPUT
to a VIDEO input
TV with VIDEO input/output
to a VIDEO output
or
to an S VIDEO input
to an S VIDEO output
TV with S VIDEO input/output
: Signal flow

If your TV has S VIDEO input/ output connectors, connect the S VIDEO INPUT/OUTPUT connectors of the printer to the S VIDEO input/output connectors of the TV, using the S video connecting cable YC-15V (not supplied).

* To check the image to be printed, the connections indicated with --- are necessary.

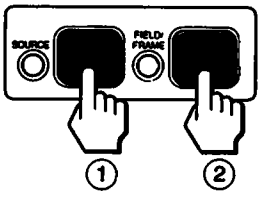
2 Turn on the power of the printer and the TV.

Set the TV/VCR switch on the TV to "TV." (You can watch the TV programs as usual.)



3 When the image you want to print appears on the screen, ① press the CAPTURE button to store it in memory and ② press the PRINT button to print.

The playback picture which appeared on the screen when you pressed the CAPTURE button is stored and the printout emerges from the paper outlet.



To change the image stored in memory

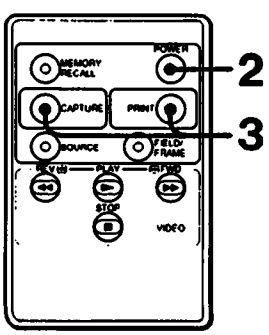
1 Set the TV/VCR switch on the TV to "TV."
2 Press the SOURCE button.
3 Press the CAPTURE button to store a new image.
4 Press the PRINT button to print.

To check the image stored in memory

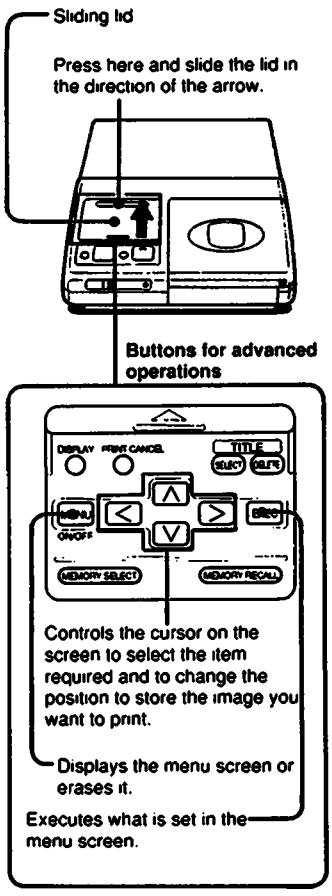
Set the TV/VCR switch on the TV to "VCR." The stored image is displayed on the screen. If the stored image is not displayed, press the MEMORY RECALL button (page 25).

Notes

- When you want to make a variety of printouts using the MENU screen, set the TV/VCR switch on the TV to "VCR." Display the MENU screen. After finishing the MENU settings, set the switch to "TV" and store the image in memory and print.
- When you turn off the printer, the image stored in memory is erased. When you print from video equipment, you can store the same image again. When printing from the TV, however, be careful because you cannot store the same broadcast picture again.



For advanced operations, open the sliding lid on the top of the unit and use the buttons (menu operations buttons) under the lid. You can make a variety of printouts by changing how to store the image in memory (MEMORY MODE setting) and how to print the stored image (PRINT MODE setting) according to the MENU screen. For the settings of print quantity and picture quality adjustment, also use the MENU screen. The MENUS are organized as illustrated on the right: the main MENU, five sub-menus and three menus under the sub-menus.


Sliding lid
Press here and slide the lid in the direction of the arrow.
Buttons for advanced operations
Controls the cursor on the screen to select the item required and to change the position to store the image you want to print.
Displays the menu screen or erases it.
Executes what is set in the menu screen.

The Organization of the Menus

Main MENU

(Press the MENU button to display the main MENU.)

```
·····MENU·····
▶PRINT QTY   - 1
 CAPTION     - NO CAPTION
 MEMORY MODE - NORMAL
 PRINT MODE  - NORMAL
 PICTURE ADJ. - STANDARD
Item:↕ Next:EXEC End:MENU
```

Sub-menus

(Select the item required on the main MENU and press the EXEC button. One of the following menus appears on the screen.)

PRINT QTY (quantity) setting menu

To set the print quantity.

→ See page 39.

```
PRINT QTY SET
PRINT QTY: 1
Set: ↕  End:EXEC
```

CAPTION setting menu

To input a date or a title or both below the image.

→ See page 34.

```
CAPTION SELECT
▶NO CAPTION
 DATE ONLY
 TITLE ONLY
 DATE&TITLE
Item: ↕  End:EXEC
```

MEMORY MODE setting menu

To set how to store the image in memory.

→ See page 22.

```
MEMORY MODE
▶NORMAL
 SPLIT 4
 SPLIT16
 STROBE 4 - NORM
 STROBE16 - NORM
Item:↕ speed:↕ End:EXEC
```

PRINT MODE setting menu

To set how to print.

→ See page 30.

```
PRINT MODE
▶NORMAL
 MULTI 4
 MULTI16
 HEART SHAPE
 OVAL SHAPE
 HALF
Item:↕  End:EXEC
```

PICTURE ADJ. (quality adjustment) setting menu

To adjust the picture quality of the printouts.

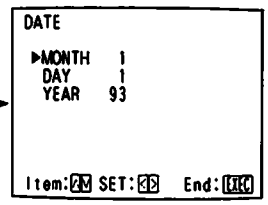
→ See page 41.

```
PICTURE ADJUST
▶STANDARD
 RED     - ||||||||| +
 GREEN   - ||||||||| +
 BLUE    - ||||||||| +
 BRIGHT  - ||||||||| +
 SHARP   - ||||||||| +
Item:↕ SET:↕  End:EXEC
```

DATE setting menu

To input a date.

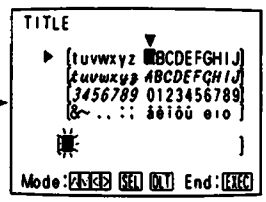
→ See page 35.



TITLE setting menu

To input a title such as a date and a comment.

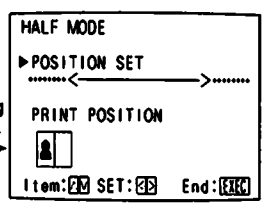
→ See page 36.



HALF MODE setting menu

To select a portion of the image stored in memory for half-size printing and to locate where it is to be printed.

→ See page 32.



Note

As long as the menu screen is displayed, you cannot operate the buttons for basic operations (CAPTURE, PRINT, FIELD/FRAME and SOURCE), the MEMORY SELECT button nor the MEMORY RECALL button.

Flow Chart of the Advanced Operations

Select how to store the image in the MEMORY MODE setting menu.

⇩

Store the image you want to print.

⇩

Select how to print the stored image in the PRINT MODE setting menu.

⇩

If you want to put a caption (date and title) below the image, input it in the CAPTION setting menu.

⇩

If you want to print more than one copy, select the desired number in the PRINT QTY (quantity) setting menu.

⇩

Start printing.

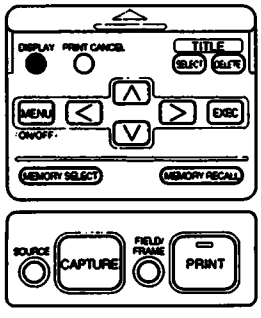
⇩

If the picture quality of the printout requires adjustment, adjust the quality in the PICTURE ADJ. (quality adjustment) setting menu.

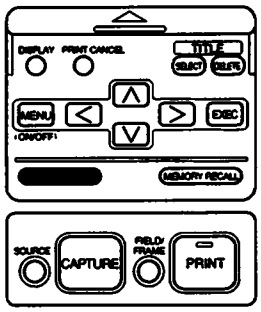
The unit can make a printout of different images in 1/4 size or 1/16 size. First, select how to store the image you want to print. You can store the different or strobe images in 1/4 size or 1/16 size. You can store multiple 1/4 size and 1/16 size images in a full-size image in the process of storing in memory.
Then, select how to print the stored image. Besides printing as usual, you can trim the image into a heart shape or oval shape and also print a portion of the image for half-size printing in one of the four positions selectable in the menu.

The following are the steps to display the MEMORY MODE setting menu.

To erase the indications on the screen
If the part of the picture you want to check is covered with the indications, press the DISPLAY button. Indications on the screen disappear but you can still operate the unit with the buttons on the unit and the remote commander as before.

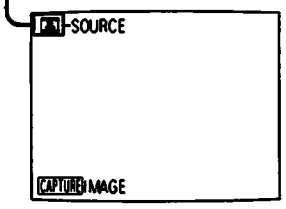


1 Make sure that the memory (capture) mode is set to "FRAME."



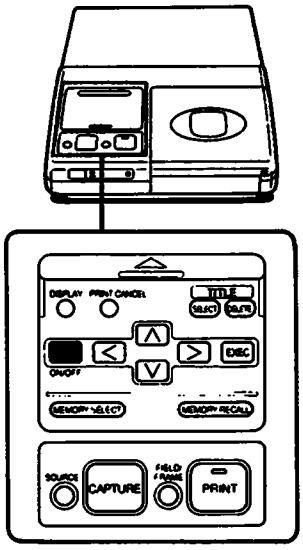
If FIELD A [FA] or FIELD B [FB] is displayed in upper left of the screen, open the sliding lid on the top of the unit and press the MEMORY SELECT button to display FRAME [F]. Then press the CAPTURE button.

Each time you press the MEMORY SELECT button, the memory (capture) mode indication changes.



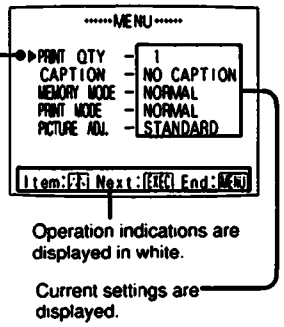
About memory (capture) mode
While you are setting the MEMORY MODE, you can use the FRAME mode only.
If you set the memory mode to "FIELD" and try to select "MEMORY MODE" in the main MENU, you cannot operate the cursor control buttons and the error message "Memory image with [F]." appears on the screen.

2 Press the MENU button.



The background becomes darker and the main MENU screen appears.

Selected item (sub-menu) with the cursor is displayed in yellow.

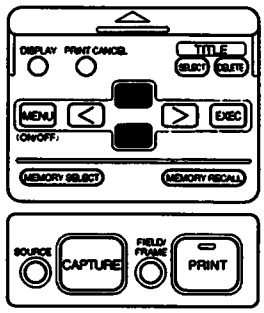


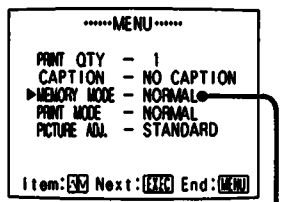
Operation indications are displayed in white.

Current settings are displayed.

To erase the main MENU
Press the MENU button.

3 Select "MEMORY MODE" with the ∧ ∨ buttons.

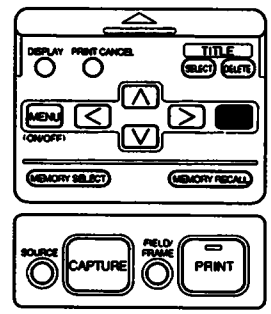


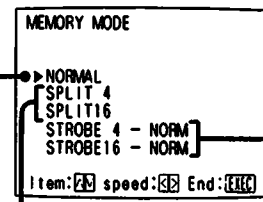


The current setting is displayed.

4 Press the EXEC button.

The MEMORY MODE setting menu (sub-menu) appears.

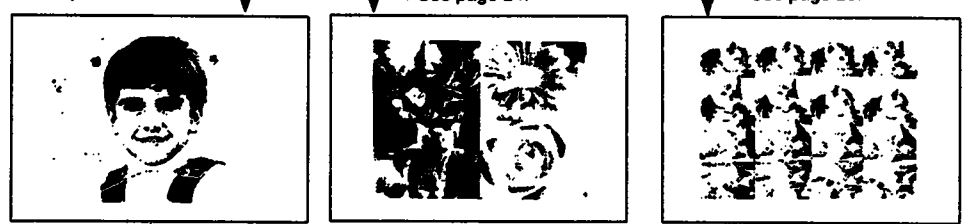




To store one image in memory.

To store different images in 1/4 size or 1/16 size.
→ See page 24.

To store strobe images in 1/4 size or 1/16 size.
→ See page 26.



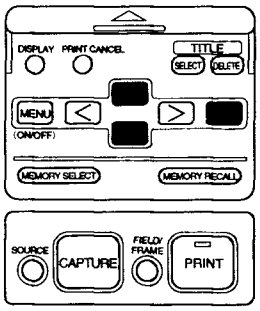
Application

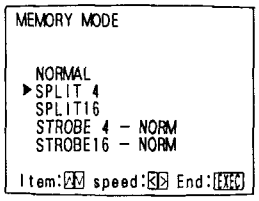
To store a multiple inset image.
→ See Page 28.

Storing different images in 1/4 size or 1/16 size

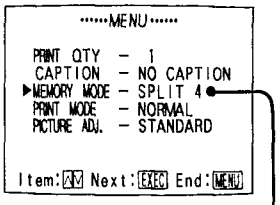
Store different images in 1/4 size or 1/16 size and print them.
First, select the MEMORY MODE setting menu in the main MENU according to steps 1 – 4 on pages 22 and 23.

1 Select "SPLIT 4" or "SPLIT 16" with the ∧ ∨ buttons and press the EXEC button.



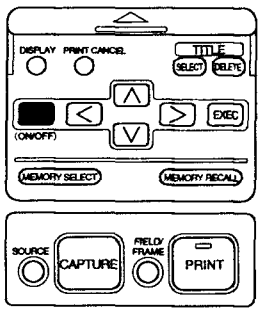


When you press the EXEC button, the screen returns to the main MENU.

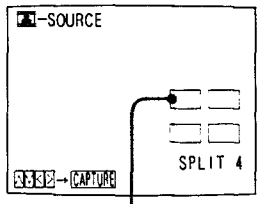


The current setting is displayed.
(The illustration shows that different images in 1/4 size will be stored.)

2 Press the MENU button to exit the menu mode.



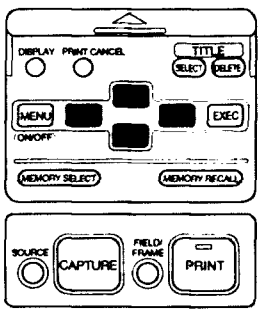
A playback picture with four squares to show the position where the images can be stored (SPLIT 4 or SPLIT 16 input screen) appears on the screen.

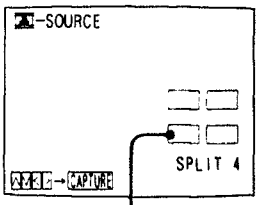


The position where an image can be stored first flashes in blue.

If the stored image is displayed
Press the SOURCE button to display the playback picture (SPLIT 4 or SPLIT 16 input screen.)

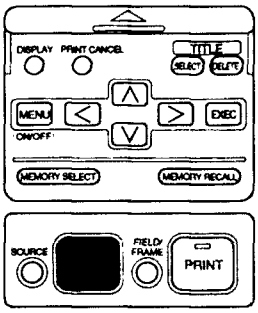
3 If you want to change the position where the image can be stored first, move the cursor with the ∧ ∨ < > buttons.





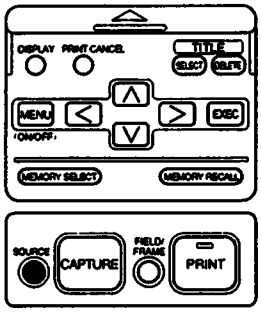
The position where the image will be stored first flashes in blue.

4 When the image you want to print appears, press the CAPTURE button.

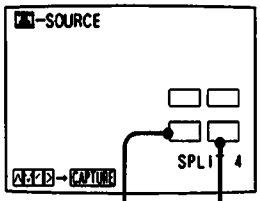


The stored image is displayed.

5 Press the SOURCE button.



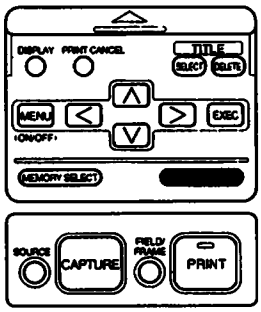
The playback picture reappears on the screen.



Selected position is displayed in yellow.

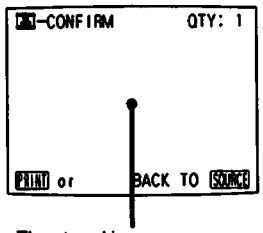
The position where an image can be stored next flashes in blue. (The position flashes in the order of upper left - upper right - under left - under right ...)

To confirm the stored image
Press the MEMORY RECALL button. The stored image is displayed on the screen. After confirming the image, press the SOURCE button to display the playback picture again.



6 Repeat steps 3, 4 and 5 until you have stored images in all the positions.

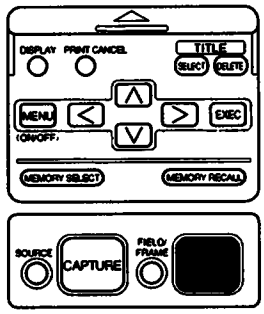
When the images are stored in all the positions, the stored images are displayed in 1/4 size or 1/16 size on the screen. If the playback picture is displayed, press the MEMORY RECALL button to display the stored images to be printed.

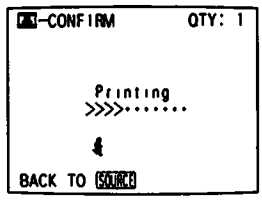


The stored images are displayed in 1/4 size or 1/16 size.

To change the image stored in memory
Press the SOURCE button to display the playback picture again. Make the position you want to change flash with the ∧ ∨ < > buttons. Then store a new image to replace the previous one.

7 Press the PRINT button.





To see the playback picture during printing
Press the SOURCE button to display the playback picture. (You cannot store a new image until the printing is completed.)

To undo the SPLIT 4 or SPLIT 16 screen
Press the MENU button. If you want to return to the normal printing, select "MEMORY MODE" in the main MENU and select "NORMAL" in the MEMORY MODE setting menu.

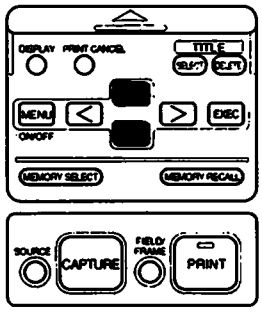
About the PRINT MODE setting
If you select an item other than "NORMAL" in the PRINT MODE setting menu, you can make a variety of printouts as follows: Printing the same SPLIT 4 or SPLIT 16 image in 1/4 size or 1/16 size*, trimming the image into a heart or oval shape and printing a portion of the stored image. For details, refer to "A Variety of Print Settings (PRINT MODE setting)" on pages 30 – 33.

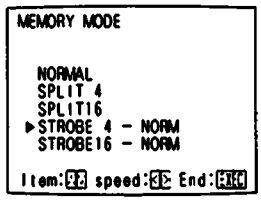
*We do not recommend this operation because the picture quality of the multiplied SPLIT 4 or SPLIT 16 images is rather poor.

Storing strobe images in 1/4 size or 1/16 size

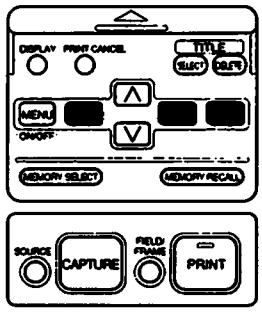
Store strobe images in 1/4 size or 1/16 size and print them.
First, select the MEMORY MODE setting menu in the main MENU according to steps 1 – 4 on pages 23 and 24.

1 Select "STROBE 4" or "STROBE 16" with the ∧ ∨ buttons.

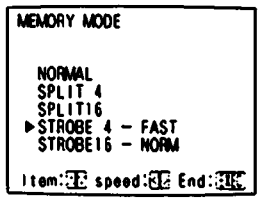




2 Select the speed of the strobe action with the < > buttons and press the EXEC button.

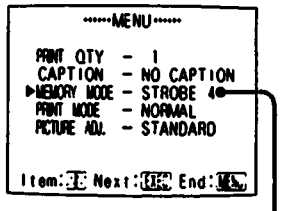


To increase the speed, press the > button. To decrease, press the < button.



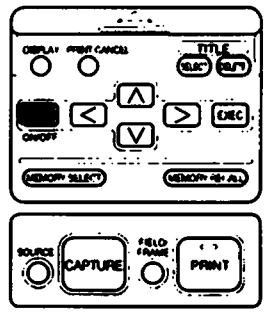
The images are stored in memory at the following intervals:
FAST: approx. every 0.07 second
NORM: approx. every 0.3 second
SLOW: approx. every 0.6 second

When you press the EXEC button, the screen returns to the main MENU.

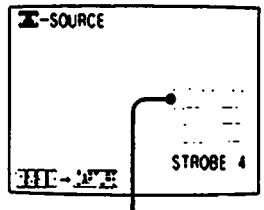


The current setting is displayed.
(The illustration shows that strobe images in 1/4 size will be stored.)

3 Press the MENU button to exit the menu mode.



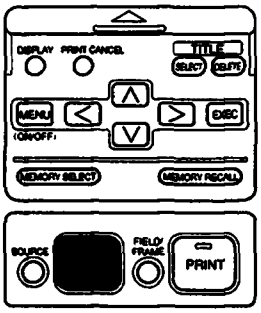
A playback picture with four squares to show the position where the image can be stored (STROBE 4 or STROBE 16 input screen) appears on the screen.



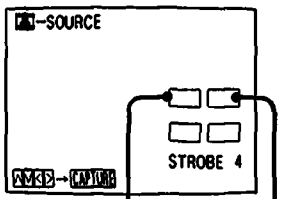
The position where the image can be stored first flashes.

If the stored image is displayed
Press the SOURCE button to display the playback picture (STROBE 4 and STROBE 16 input screen.)

4 When the image you want to print appears, press the CAPTURE button to store it in memory.



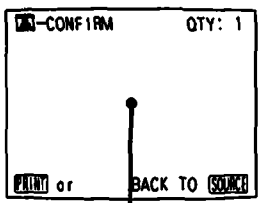
At the moment you press the CAPTURE button, the printer starts to store the strobe images in 1/4 size or 1/16 size.



The selected position is displayed in yellow.

The position where an image can be stored next flashes in blue. (The position flashes in the order of upper left → upper right → under left → under right ...)

When the images are stored in all the positions, the stored images are displayed in 1/4 size or 1/16 size on the screen.

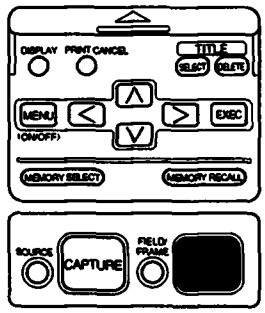


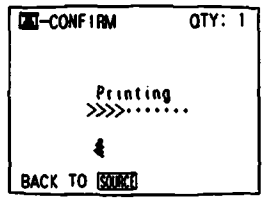
The stored images are displayed in 1/4 size or 1/16 size.

To change the image stored in memory

Press the SOURCE button to display the playback picture again. When the image you want to print appears, press the CAPTURE button to store a new image.

5 Press the PRINT button.





To see the playback picture during printing

Press the SOURCE button to display the playback picture. (You cannot store a new image until the printing is completed.)

To undo the STROBE 4 or STROBE 16 screen

Press the MENU button. If you want to return to the normal printing, select "MEMORY MODE" in the main MENU and select "NORMAL" in the MEMORY MODE setting menu.

About the PRINT MODE setting

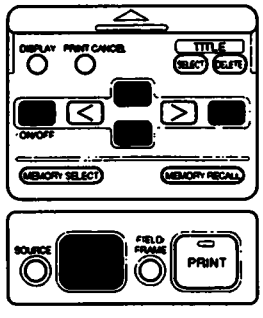
If you select an item other than "NORMAL" in the PRINT MODE setting menu, you can make a variety of printouts as follows: Printing the same STROBE 4 or STROBE 16 images in 1/4 size or 1/16 size*, trimming the image into a heart or oval shape and printing a portion of the stored image. For details, refer to "A Variety of Print Settings (PRINT MODE setting)" on pages 30 – 33.

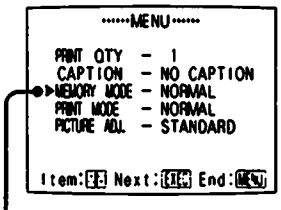
*We do not recommend this operation because the picture quality of the multiplied STROBE 4 or STROBE 16 images is rather poor.

Storing multiple inset images

Store a full-size background image and then store 1/4-size and 1/16-size inset images.
First, select the MEMORY MODE setting menu in the main MENU according to steps 1 – 4 explained on pages 22 and 23.

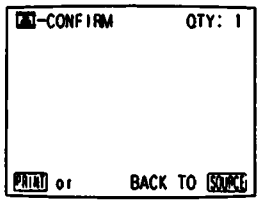
1 **Select "NORMAL" with the ∧ ∨ buttons and press the EXEC button. Then press the MENU button. When the image you want to print appears, press the CAPTURE button to store the background image (full-size).**



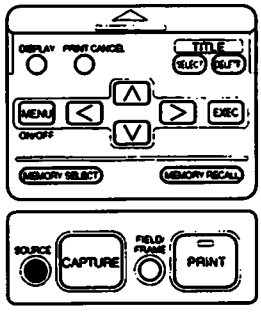


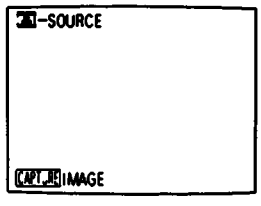
When you select the "NORMAL" and press the EXEC button, the main MENU reappears.

- When you press the MENU button, the playback picture is displayed. (If the stored image is displayed instead of the playback picture, press the SOURCE button.)
- When you press the CAPTURE button, the stored image is displayed. (Set the CAPTURE mode to "FRAME.")

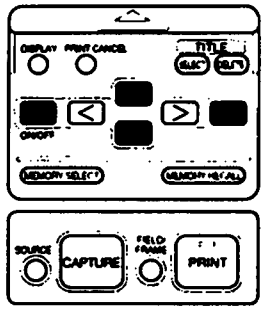


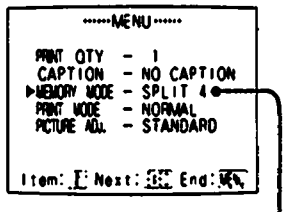
2 **Press the SOURCE button to display the playback picture.**





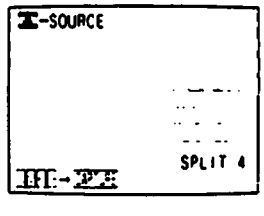
3 **Press the MENU button to display the main MENU. Select "SPLIT 4" or "SPLIT 16" and press the EXEC button. Then press the MENU button.**



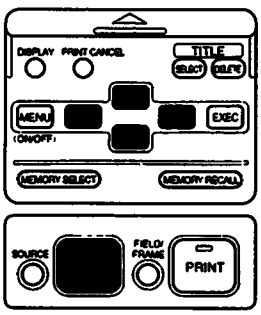


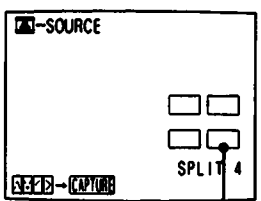
Select "SPLIT 4" or "SPLIT 16" and press the EXEC button. The main MENU is displayed

- When you press the MENU button, the following screen is displayed.



4 Select where an image is to be inset with the ∧ ∨ < > buttons. When the image you want to inset appears, press the CAPTURE button.





Selected position flashes. (The illustration shows the screen of SPLIT 4 mode.)

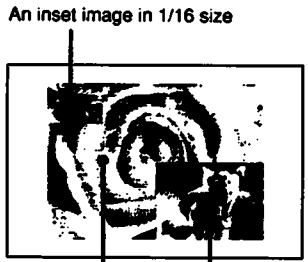
When you press the CAPTURE button, the stored image is displayed.

Background full-size image

The inset image

5 To inset multiple images, repeat steps 2, 3 and 4 in the order.

The stored image to be printed is displayed on the screen.



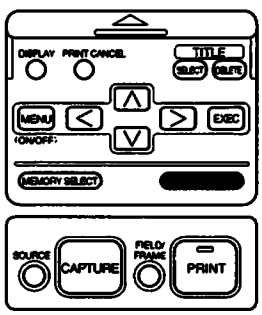
An inset image in 1/16 size

Full-size background image

An inset image in 1/4 size

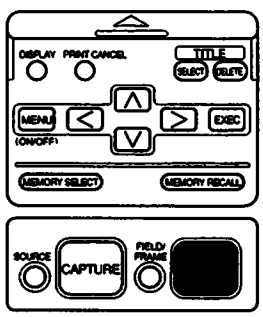
To change the image stored in memory
Repeat steps 2, 3 and 4 to replace the previous image.

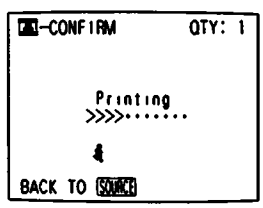
To confirm the stored image
Press the MEMORY RECALL button. The stored image is displayed.



If the playback picture is displayed on the screen
As long as the playback picture is displayed on the screen, you cannot start printing. Press the MEMORY RECALL button to display the stored image on the screen and then press the PRINT button.

6 Press the PRINT button.





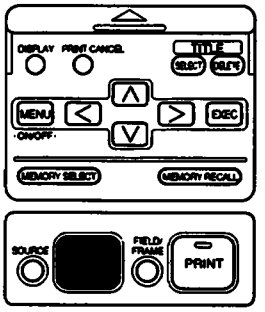
About the PRINT MODE setting
If you select an item other than "NORMAL" in the PRINT MODE setting menu, you can make a variety of printouts as follows: Printing the same multiple inset image in 1/4 or 1/16 size*, trimming the image into in a heart or oval shape and printing a portion of the stored image. For details, refer to "A Variety of Print Settings (PRINT MODE Setting)" on pages 30 – 33.

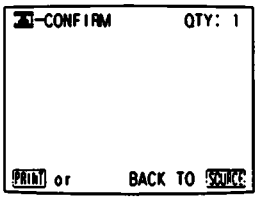
*We do not recommend this operation because the picture quality of the multiplied images is rather poor.

To return to the normal printing
Press the MENU button. Select "MEMORY MODE" in the main MENU and select "NORMAL" in the MEMORY MODE setting menu.

This chapter explains how to set the print mode of the stored image so that you can make a variety of printouts. Besides printing in the normal mode, you can print the stored image in 1/4 size (MULTI 4) or 1/16 size (MULTI 16) and trim the image in a heart or oval shape. You can also print a portion of the image for half-size printing in one of the four positions selectable in the menu.

1 When the image you want to print appears, press the CAPTURE button.

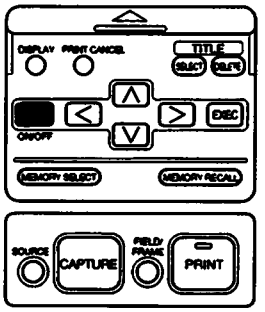




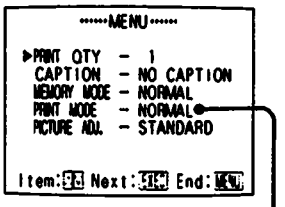
About the MEMORY MODE setting

You can also select various print settings for the SPLIT 4/SPLIT 16 images or STROBE 4/STROBE 16 images which have been stored in the MEMORY MODE setting menu (page 22). (However, we do not recommend printing the stored SPLIT 4/SPLIT 16 or STROBE 4/STROBE 16 images using the 1/4- or 1/16-size print setting because the picture quality of the printout will be rather poor.) In this chapter, we will explain the steps to set the print mode for the "NORMAL" (full-size) image.

2 Press the MENU button.

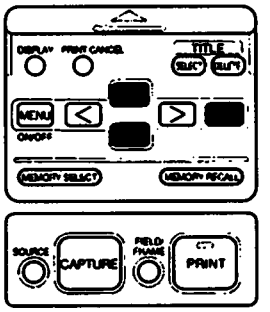


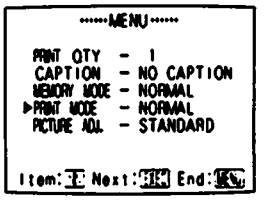
The main MENU is displayed on the screen.



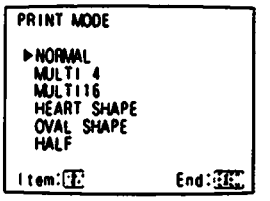
The current setting is displayed.

3 Select "PRINT MODE" with the ∧ ∨ buttons and press the EXEC button.

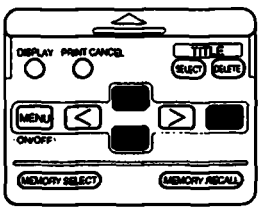


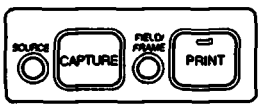


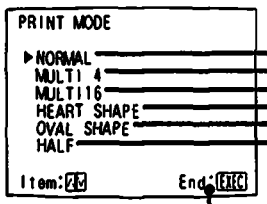
When you press the EXEC button, the PRINT MODE setting menu is displayed on the screen.



4 Select the desired item with the ∧ ∨ buttons and press the EXEC button.



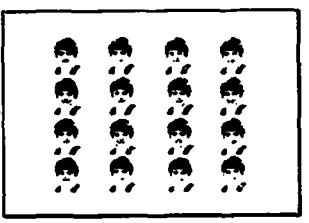




When you select "HALF," the indication is "Next:EXEC"

Print the stored image in NORMAL mode. (Whenever the printer is turned on, this setting is selected.)
→**Proceed to step 8 on page 33.**

Print the stored image in 1/4 size with white divisions.
→***Proceed to step 8 on page 33.***



Print the stored image in 1/16 size with white divisions.
→**Proceed to step 8 on page 33.**

Print the image trimmed in a heart shape*.
→**Proceed to step 8 on page 33.**

Print the image trimmed in an oval shape*.
→**Proceed to step 8 on page 33.**

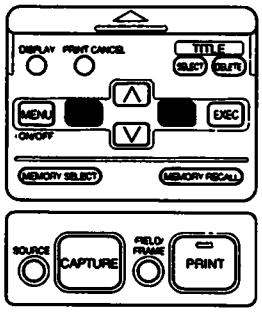
Select a portion for half-size printing, select one of the four positions to print the image and print.
→**Proceed to step 5 on page 32.**

Notes

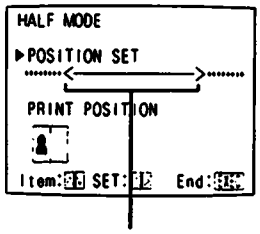
* You cannot check the stored image trimmed in a heart or oval shape on the screen. Be sure to store a picture where the subject is in the center.
To get the clearer printout, we recommend storing the image in the FRAME mode. Press the MEMORY SELECT button to select "FRAME," store the image and print it. If you store the image in the FIELD mode, the outline of the printed picture may be coarse. For details, refer to "FRAME Mode and FIELD Mode (About Memory (Capture) Mode)" on page 45.

(to be continued)

5 (When you select "HALF" in the PRINT MODE setting menu) Select the print range (trimming range) of the stored image with the < > buttons.



The trimming range will move to the left with the < button, and to the right with the > button.

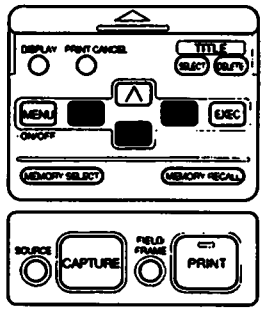


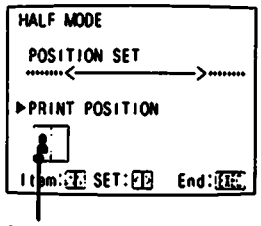
Trimming range

Note

If you keep pressing the < button or the > button, the mark to indicate the left margin or the right margin of the trimming range disappears from the screen. You can, however, set the margins outside of the points where the marks disappear from the screen as long as the bar to show the trimming range moves. Though the mark to show the left or right margin is not indicated on the screen, it is set in the unit.

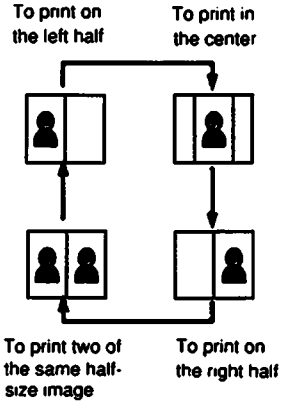
6 Select "PRINT POSITION" with the v button and select the printing position of the half-size image whose trimming range was already set in step 5, with the < > button.



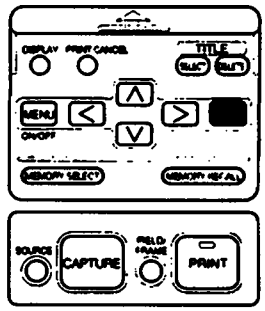


Current printing position (to print on left half)

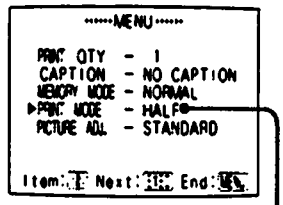
Each time you press the > button, the printing position moves as illustrated below. (If you press the < button, the position moves the other way.)



7 Press the EXEC button.

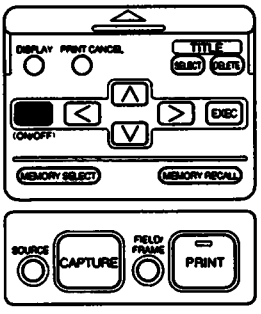


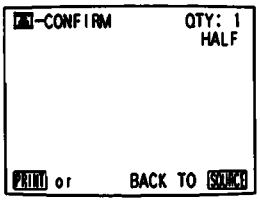
The main MENU is displayed on the screen.



The setting of the PRINT MODE is displayed
(The illustration shows that the HALF mode is selected.)

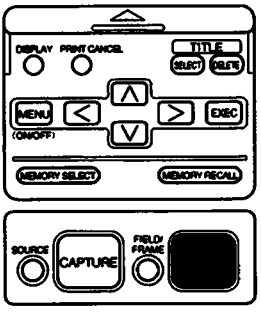
8 Press the MENU button to exit the menu mode.

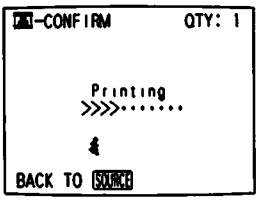




To change the image stored in memory
Press the SOURCE button to display the playback picture again. When the image you want to print appears, press the CAPTURE button.

9 Press the PRINT button.



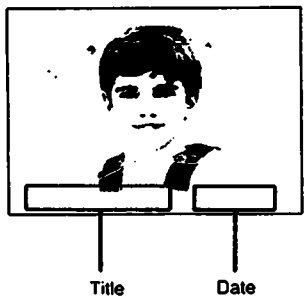


To see the playback picture during printing
Press the SOURCE button to display the playback picture. (You cannot store a new image until the printing is completed.)

To cancel the PRINT MODE setting
Press the MENU button. If you want to return to the normal printing, select "PRINT MODE" in the main MENU and select "NORMAL" in the PRINT MODE setting menu.

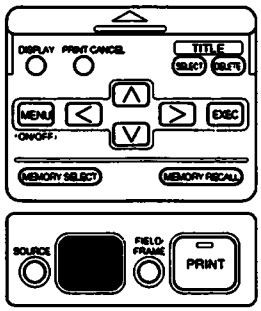
Note
You cannot print on already used video print paper.

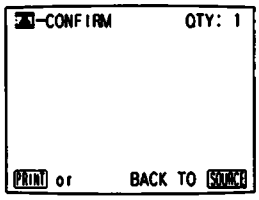
You can put a date and a title below the image. You can select "DATE ONLY," "TITLE ONLY" or "DATE & TITLE" in the CAPTION setting menu. You can put the date on the right side of the bottom margin and input a title with a maximum 32 characters from the left end of the bottom margin. Select "CAPTION" in the main MENU and set the date and the title according to the following procedures.



About the CAPTION mode
When you print the image in the FIELD A or FIELD B mode, captions are sometimes coarse but this is not a problem. To make the captions more distinct, select "FRAME" with the MEMORY SELECT button and then store the image in memory and print. For details, refer to "FRAME Mode and FIELD Mode (About Memory (Capture) Mode)" on page 45.

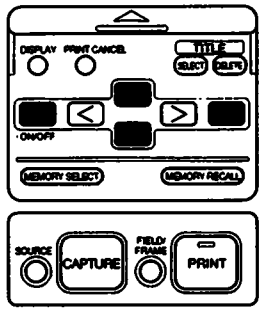
1 When the image you want to print appears, press the CAPTURE button.

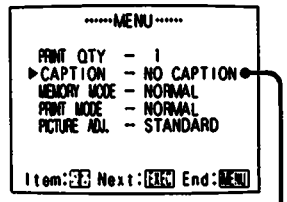




About the MEMORY MODE setting
You can put a date and a title on the SPLIT 4/SPLIT 16 or STROBE 4/STROBE 16 images which were stored in the MEMORY MODE setting menu (page 22.) We will explain the steps to put captions below the "NORMAL" (full-size) image in this chapter.

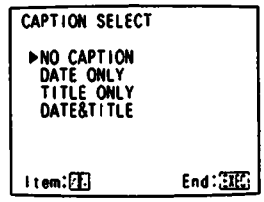
2 Press the MENU button and select "CAPTION" with the ∧ ∨ buttons. Then press the EXEC button.



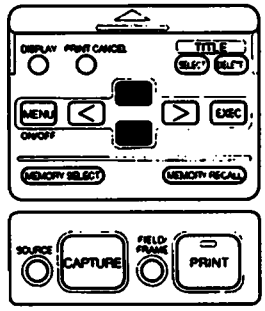


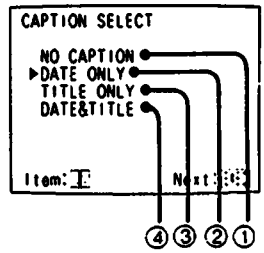
The current setting is displayed.

When you press the EXEC button, the CAPTION setting menu is displayed on the screen.



3 Select the desired item with the ∧ ∨ buttons and press the EXEC button.





① Not to print a date nor a title (Whenever the printer is turned on, this item is selected.)
→Proceed to step 10 on page 37.

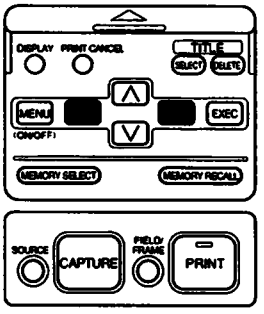
② To print a date only.
→Proceed to step 4 (the DATE setting menu) on page 35.

③ To print a title only.
→Proceed to step 7 (the TITLE setting menu) on page 36.

④ To print both a date and a title
→Proceed to step 4 (the DATE setting menu) on page 35.

Printing with a date

4 Set the month with the < > buttons.



To increase the number, press the > button. (If you keep pressing the > button, the number increases to 12 and then returns to 1.)
To decrease the number, press the < button. (If you keep pressing the < button, the number decreases to 1 and then jumps to 12.)

When you selected "DATE ONLY" in step 3:

```
DATE

▶MONTH   1
 DAY     1
 YEAR   93


Item:↕ SET:◁▷  End:EXEC
```

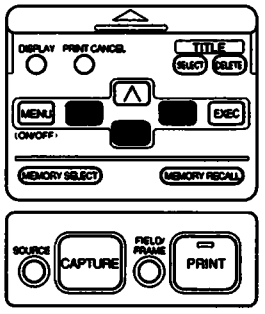
When you selected "DATE & TITLE" in step 3:

```
DATE&TITLE

▶MONTH   1
 DAY     1
 YEAR   93


Item:↕ SET:◁▷ Next:EXEC
```

5 Select "DAY" with the ∧ ∨ buttons and enter the desired number with the < > buttons. Then select "YEAR" and set the desired number in the same way as a day.



To increase the number, press the > button. (If you keep pressing the > button, the number increases to 31 and then returns to 1 for the date. In case of the year, it increases to 99 and then returns to 00.)
To decrease the number, press the < button. (If you keep pressing the < button, the number decreases to 1 and then jumps to 31 for the date. In case of the year, it decreases to 00 and then jumps to 99.)

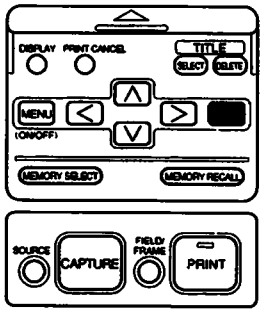
```
DATE&TITLE

 MONTH   1
 DAY     1
▶YEAR   93


Item:↕ SET:◁▷ Next:EXEC
```

To change the date
Select the item you want to change with the ∧ ∨ buttons and change the number with the < > buttons. If you turn the power off, the entered date returns to the default date (1. 1. 93).

6 Press the EXEC button.



When you selected "DATE ONLY" in step 3:
The screen returns to the main MENU.
→Proceed to step 10 on page 35.

```
·····MENU·····

 PRINT QTY   - 1
▶CAPTION     - DATE ONLY
 MEMORY MODE - NORMAL
 PRINT MODE  - NORMAL
 PICTURE ADJ. - STANDARD


Item:↕ Next:EXEC End:MENU
```

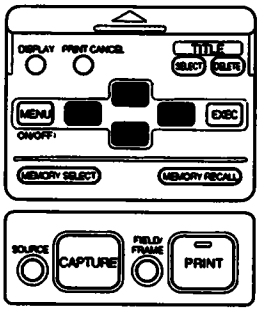
What is set in the CAPTION setting menu.

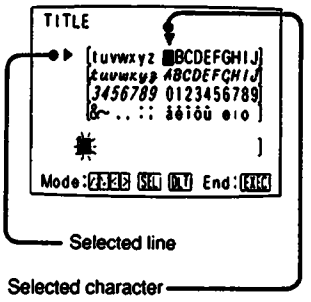
When you selected "DATE & TITLE" in step 3:
The TITLE setting menu is displayed on the screen.
→Proceed to step 7 on page 35.

Printing with a title

You can print a title of up to 32 characters which consist of letters, numbers and symbols. **To print a title only, follow steps 1 – 3 on page 34 to select "TITLE ONLY" in the CAPTION setting menu. To print both a date and a title, also follow steps 1 – 6 on pages 34 and 35 to enter a date.**

7 Select the desired line with the ∧ ∨ buttons and select the desired character with the < > buttons.



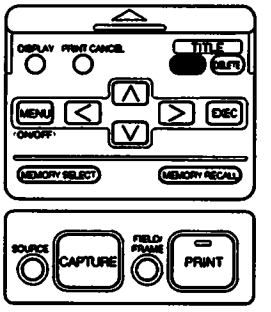


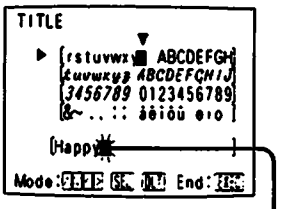
Selected line

Selected character

Though only a part of each line is displayed on the screen, you can scan the rest of the characters in each line by keeping pressing the > button (the characters scroll toward left) or the < button (the characters scroll toward right.)

8 Press the TITLE SELECT button to enter the character selected in step 7 in the input line.

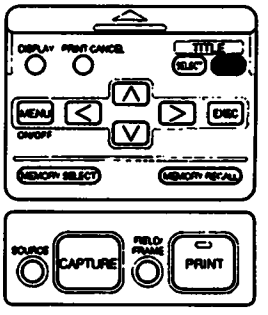




The selected characters are indicated in the input line.

To replace a character with a new one

Select the "input line" with the ∨ button. Press the > button to move the cursor to the right of the character you want to change. Press the TITLE DELETE button. The character you want to change is deleted. Select the line which contains the character you want to input with the ∧ ∨ buttons. Select a new character with the < > buttons and press the TITLE SELECT button.



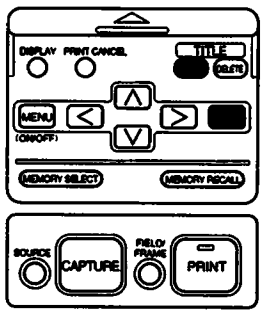
To insert a character

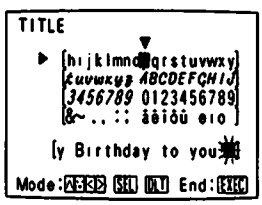
Select the "input line" with the ∨ button and move the cursor to the place where you want to add a character with the < > buttons. Select the line which contains the character you want to insert with the ∧ ∨ buttons and select the character with the < > buttons and then press the TITLE SELECT button.

To enter a space between the characters

Select any line with the ∧ ∨ buttons and move the cursor to the "space (the place no character is indicated)" with the < > buttons. Press the TITLE SELECT button. If you want to enter more than one space, repeat the above operation.

9 Repeat steps 7 and 8 until you have entered all the characters (up to 32 characters) for your title and press the EXEC button.

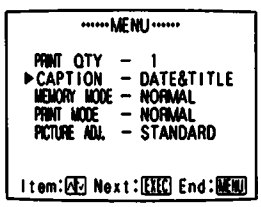




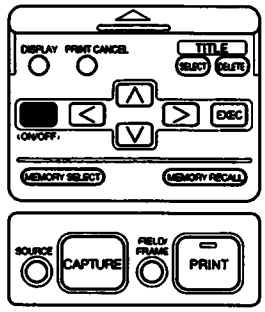
When you press the EXEC button, the main MENU returns to the screen.

When you enter more than 18 characters in the input line

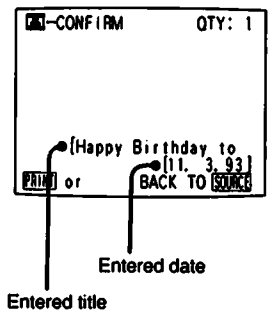
You can enter the title of up to 32 characters but only 18 characters can be indicated in the input line on the screen. When you input the 19th character, the characters in the input line move left and the character at the extreme left disappears from the screen.



10 Press the MENU button to exit the menu screen.



The stored image with a date and title is displayed on the screen.



To change the image stored in memory

Press the SOURCE button to display the playback picture. When the image you want to print appears, press the CAPTURE button to store a new image.

If the playback picture is displayed

As long as the playback picture is displayed, you cannot start printing by pressing the PRINT button. If you have not yet stored the image, store it with the CAPTURE button. If you have already stored the image, press the MEMORY RECALL button to display the stored image and then press the PRINT button.

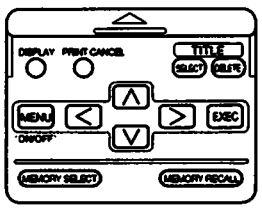
About error beeps

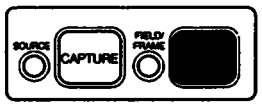
Error beeps sound three times in the following cases:

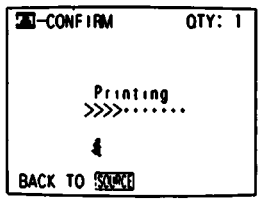
- –When you enter the first character in the input line and press the < button or the TITLE DELETE button.
- –When you enter the 32nd character and press the > button or the TITLE SELECT button.

(to be continued)

11 Press the PRINT button.



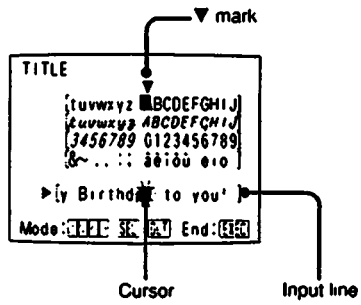




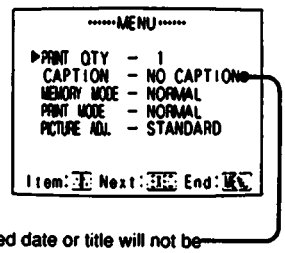
To see the playback picture during printing
Press the SOURCE button to display the playback picture. (You cannot store a new image until the printing is completed.)

To change a character after having exited the CAPTION setting menu
Select "CAPTION" in the main MENU and then select "TITLE ONLY" in the CAPTION setting menu to display the TITLE setting menu. Delete the unnecessary character with the TITLE DELETE button or select the desired line and then the desired character to replace the character in the input line. The entered title is stored in memory until the power is turned off.

Moving the cursor
When some characters are not displayed on the screen because 19 characters or more (up to 32 characters) have been in the input line, the cursor movement is restricted as follows:
When the cursor is moved to the ▼ mark and you press the < button, the cursor will not move. All the characters in the input line scroll to the right so that one of the characters which was not displayed appears at the left end of the input line. The cursor will not move past the ▼ mark until the last character which was not displayed appears on the screen.
When all the characters to the left of the cursor are displayed in the input line, the cursor can be moved to the left again by pressing the < button.
The cursor operates in the same way when using the TITLE DELETE button.



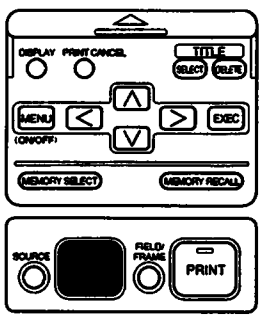
To print an image without the entered date or title
Select "CAPTION" in the main MENU. If you want to print a date only, select "DATE ONLY" in the CAPTION setting menu and press the EXEC button. To print a title only, select "TITLE ONLY" and press the EXEC button. If you do not want to print a date nor a title, select "NO CAPTION" and press the EXEC button.



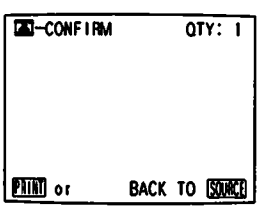
Entered date or title will not be displayed.

You can print up to 25 copies of a stored image. Set a print quantity in the PRINT QTY setting menu.

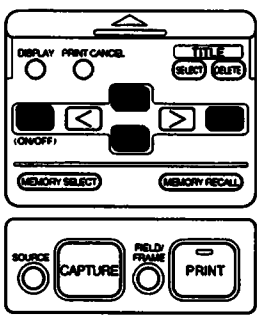
1 When the image you want to print appears, press the CAPTURE button.

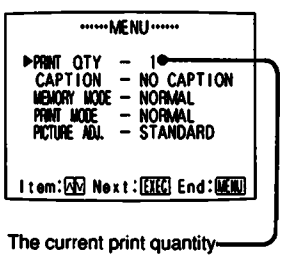


The stored image is displayed.



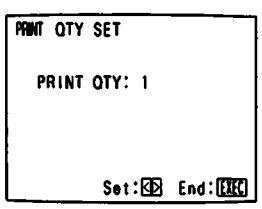
2 Select "PRINT QTY" in the main MENU with the ∧ ∨ buttons and press the EXEC button.



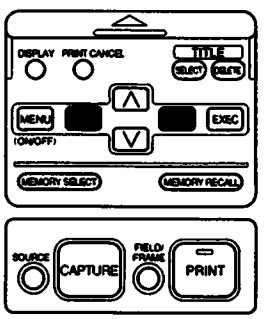


The current print quantity

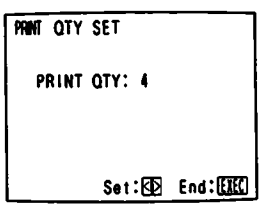
When you press the EXEC button, PRINT QTY SET menu is displayed on the screen.



3 Set the desired number with the < > buttons.

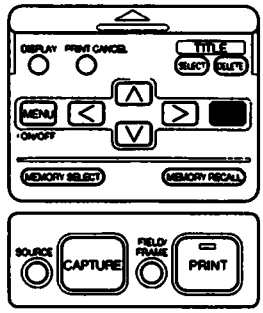


To increase the number, press the > button. If you hold the button down, the number increases continuously up to 25.
To decrease the number, press the < button. If you hold the button down, the number decreases continuously to 1.

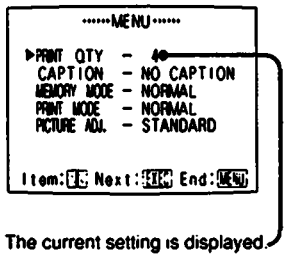


(to be continued)

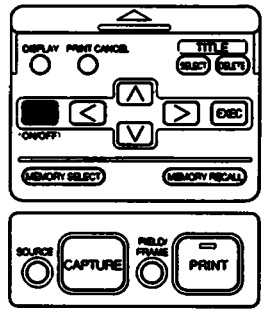
4 Press the EXEC button.

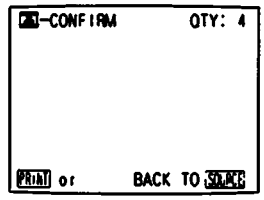


The screen returns to the main MENU.



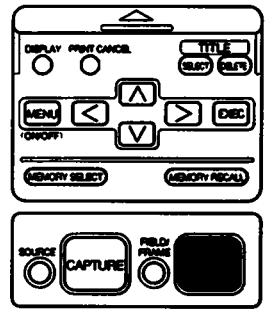
5 Press the MENU button to exit the menu mode.

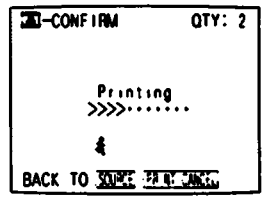




To change the image stored in memory
Press the SOURCE button to display the playback picture. When the image you want to store appears, press the CAPTURE button to store a new image.

6 Press the PRINT button.



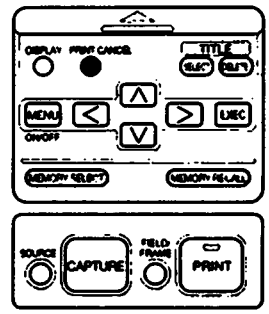


It takes about 60 seconds for each printout to emerge.

To see the playback picture during printing
Press the SOURCE button to display the playback picture. (You cannot store a new image until the printing is completed.)

If the Video print paper and the Video print cartridge run out midway
The error messages "Please insert Video Print Cartridge." and "Please place Video Print Paper in tray." appear on the screen one after another. Load the print paper and the print cartridge and then press the PRINT button again. The printing will continue as programed.

To stop printing midway
Press the PRINT CANCEL button. After the printing in process is completed, the operation is canceled.

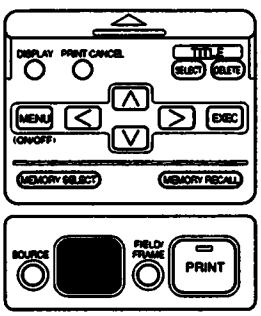


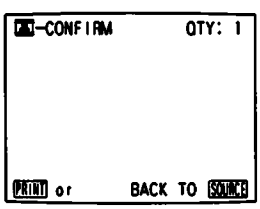
Notes

- **To prevent paper jams, do not leave more than 25 printouts on the paper outlet. If too many printouts are left there, the error message "Please remove printed paper." appears on the screen. (See page 48.)**
- When you turn off the printer, the print quantity setting returns to 1 (default.)
- If the temperature inside the printer rises too high during continuous printing, the error message "Please wait while printer resets itself." appears on the screen and printing is suspended. When the temperature inside the printer falls, the message disappears and printing resumes automatically.

You can adjust the three color elements, the brightness and the sharpness of the printouts using the PICTURE ADJ. (quality adjustment) setting menu.

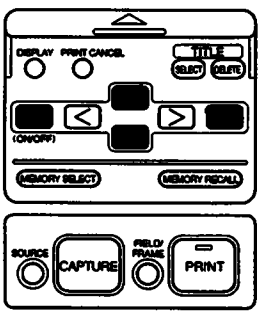
1 When the image you want to print appears, press the CAPTURE button to store it in memory.

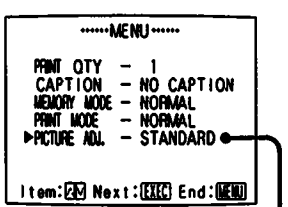




Note
You can adjust the picture quality of printouts, using the playback picture as well as the stored image. This section explains the procedures to adjust the picture quality of the stored image.

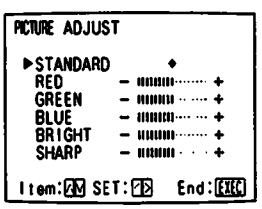
2 Press the MENU button and select "Picture ADJ." in the main MENU with the ∧ ∨ buttons.



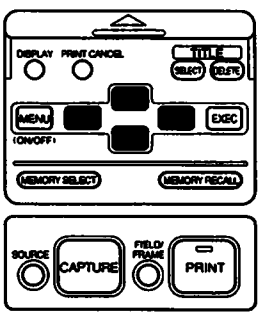


The current setting is displayed.

When you press the EXEC button, the PICTURE ADJUST setting menu is displayed.

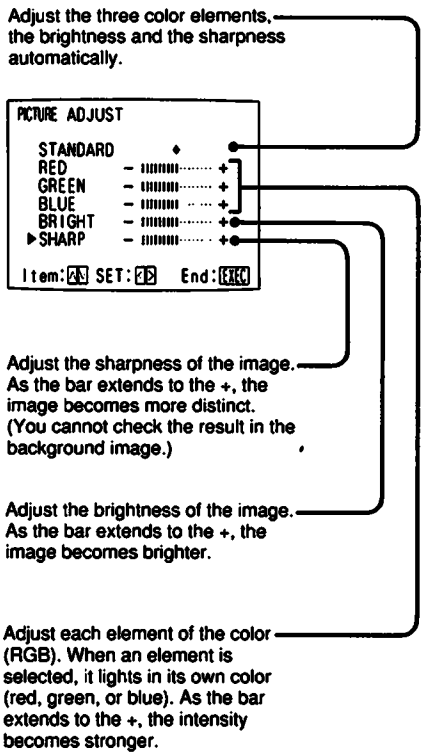


3 Select the item with the ∧ ∨ buttons and adjust the level with the < > buttons.



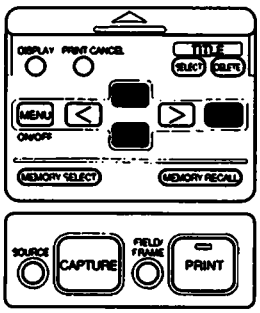
You can adjust each level of the three color elements (RGB), the brightness and the sharpness.
To increase the level: Press the > button.
To decrease the level: Press the < button.

As the picture quality of the background image changes according to the adjustment (except for the sharpness), adjust the level while checking the result.

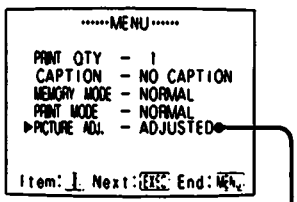

Adjust the three color elements, the brightness and the sharpness automatically.
PICTURE ADJUST
STANDARD
RED
GREEN
BLUE
BRIGHT
▶SHARP
Item: SET: End:
Adjust the sharpness of the image. As the bar extends to the +, the image becomes more distinct. (You cannot check the result in the background image.)
Adjust the brightness of the image. As the bar extends to the +, the image becomes brighter.
Adjust each element of the color (RGB). When an element is selected, it lights in its own color (red, green, or blue). As the bar extends to the +, the intensity becomes stronger.

(to be continued)

4 When adjustment is finished, put the cursor to an item other than "STANDARD" (select an item other than "STANDARD")* and press the EXEC button.



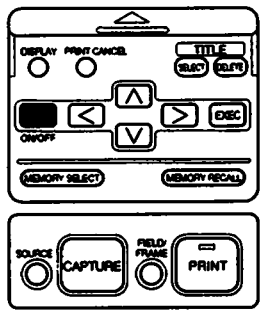
When you press the EXEC button, the screen returns to the main MENU.

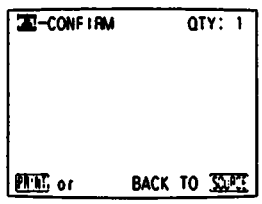


The current setting is displayed.

* If you press the EXEC button with the cursor set to "STANDARD," the picture quality of the printout is that of the "STANDARD" level, even though you have adjusted the level of each item. (the bar settings remain as they are).
If you press the EXEC button with the cursor set to an item other than "STANDARD," the picture quality of the printout is adjusted according to the level of each item displayed on the screen. The setting of "PICTURE ADJ." in the main MENU is indicated as "ADJUSTED."

5 Press the MENU button to exit the menu mode.

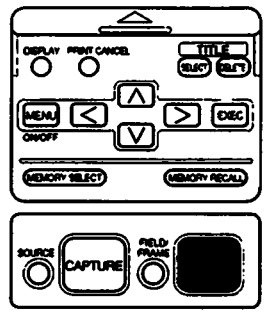


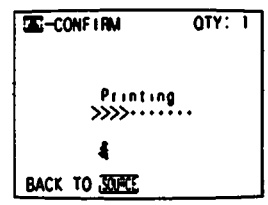


To change the image stored in memory
Press the SOURCE button to display the playback picture on the screen. When the image you want to store appears, press the CAPTURE button to store a new image.

If the playback picture is displayed
If the playback picture is displayed, you cannot start printing even if you press the PRINT button. If you have not stored an image in memory, press the CAPTURE button to store an image. If you have already stored the image, press the MEMORY RECALL button to display the stored image on the screen and press the PRINT button.

6 Press the PRINT button.





To see the playback picture during printing
Press the SOURCE button to display the playback picture. (You cannot store a new image until the printing is completed.)

Notes

- You cannot adjust the picture quality during printing.
- The picture quality of the image you have checked on the screen may be slightly different from that of the printout. This occurs when the picture quality of the television itself differs from that of the printer.
- When you turn the power off, the picture quality adjustment settings return to the default setting: the standard level.
- If you adjust the three color elements (RGB) or the brightness of the printout to either extreme, the picture quality of the printout may become poor.

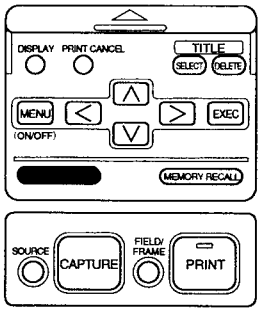
While the playback picture is displayed, you can store two images, using the two fields of the memory — FIELD A and FIELD B.

This function allows you to store one image in the FIELD A (or B) memory mode while printing in the FIELD B (or A) memory mode.

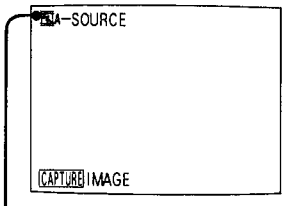
Notes

- As long as the stored image is displayed, you cannot switch from one field memory mode to another. To change the field memory mode, press the SOURCE button to display the playback picture on the screen.
- When you use the FIELD memory mode, select "NORMAL (full-size)" in the MEMORY MODE setting menu.

1 Press the MEMORY SELECT button to select "FIELD A" or "FIELD B."

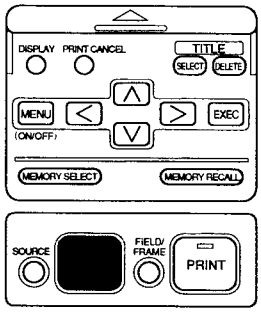


Each time you press the MEMORY SELECT button, the memory mode changes in the order of (FRAME) → A (FIELD A) → B (FIELD B).

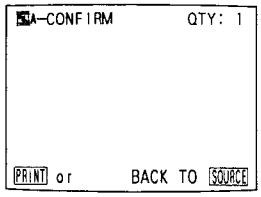


The selected memory mode is displayed. (The illustration shows that "FIELD A" is selected.)

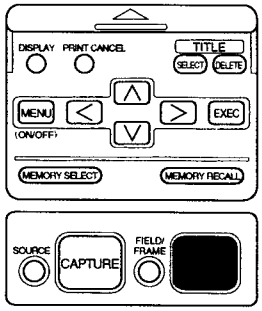
2 When the image you want to print appears, press the CAPTURE button.

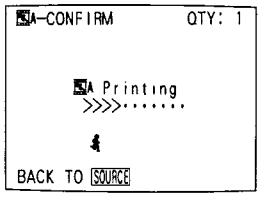


The image stored in the FIELD A mode is displayed.



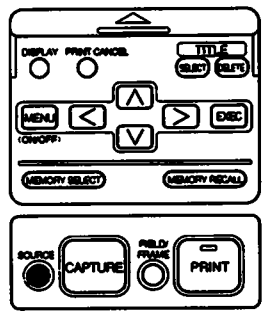
3 Press the PRINT button.



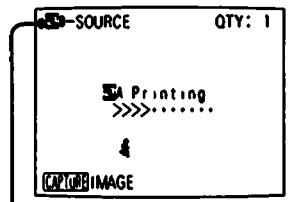


(to be continued)

4 Press the SOURCE button to display the playback picture on the screen.

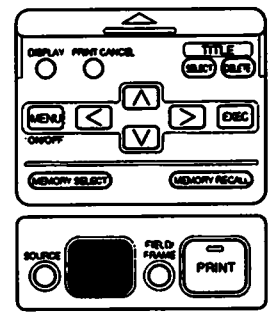


The playback picture is displayed and the memory mode is switched to the other mode (FIELD B) automatically.

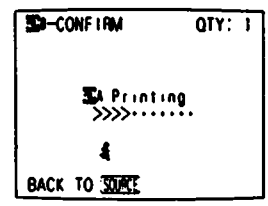


The memory mode is switched to the FIELD B mode automatically.

5 When the image you want to print appears, press the CAPTURE button to store another image.



The image stored in the FIELD B mode is displayed.
When printing of the image stored in the FIELD A mode in step 2 is completed, press the PRINT button to print the image stored in the FIELD B mode in step 5.



Notes

- If you press the PRINT button while the image stored in the FIELD A (or B) mode is being printed, a beep sounds and you cannot start printing.
- You cannot use the FRAME mode and the FIELD mode at the same time.
- When printing a full-size image in the FIELD mode, the picture quality of the printout may be coarser than that in the FRAME mode.

The unit stores an image in memory once and then prints it. The memory use status is called the "memory (or capture) mode." There are two memory modes: FRAME memory mode and FIELD (A and B) memory mode.

How the picture is stored in memory

A television reproduces an image by scanning electron beams across its screen: first on every other line; then returning to the top, on the remaining lines.
Each of the two scannings from top to bottom is called a field. Together they make up a frame. The color video printer records an image in the same way. The FRAME mode of the unit corresponds to a frame and the FIELD A or FIELD B mode corresponds to a field.

You can store two different images in the FIELD mode but the picture quality becomes coarser because the number of scanning lines is a half of that in the FRAME mode. The image stored in FRAME mode is more distinct.

If you store a subject which moves quickly in the FRAME mode, the first field image and the second field image differ slightly. When these two field images are overlapped in the frame setting, the frame image will appear jittery on the screen and blurred when printed. If you store the subject in the FIELD mode where the image is stored in one of the two fields, you can eliminate the blur to some extent. (You can select either memory mode, using the FIELD/FRAME button (page 17) and the MEMORY SELECT button (page 22).) The results of using the two memory modes are the same whether you use the FIELD/FRAME button or the MEMORY SELECT button, but the operation steps and effects are different as explained below:

- Using the FIELD/FRAME button: Store the image in the FRAME mode and then separate the frame into two fields. Choose the field that eliminates the blur.
- Using the MEMORY SELECT button : Select the FRAME mode or the FIELD mode before storing the image in memory, taking into consideration what type of printout you want to make.

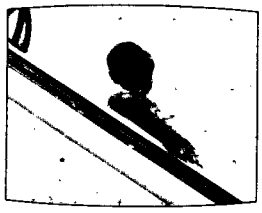
First scanning
A field image (FIELD A)

1/60 second later

Second scanning
The other field image (FIELD B)

(The subject has moved.)

Frame image (FRAME)



(The image is blurred.)

Which memory mode to use

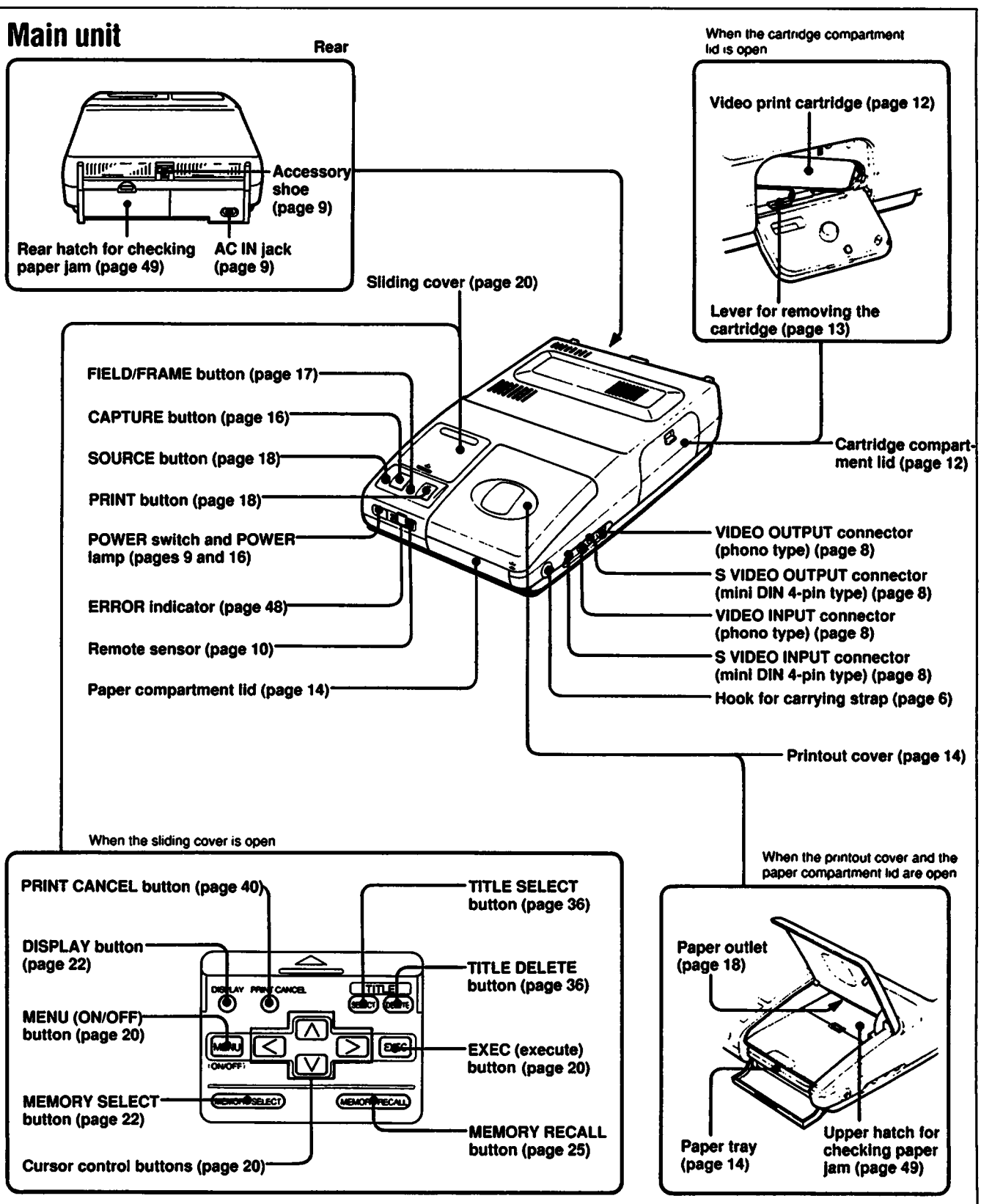
Memory Mode	Screen Display	When you want to ...
FRAME		• Make a printout of different images in 1/4 size and 1/16 size, selecting "SPLIT 4", "SPLIT 16", "STROBE 4" or "STROBE 16" in the MEMORY MODE menu. • Print an image with high-resolution. • Print a date and a title distinctly.
FIELD A/B	A B	• Print a fast-moving object without blur (only in making a full-size printout.) • Store one image while printing another.

Other Information

Location and Function of Parts and Controls

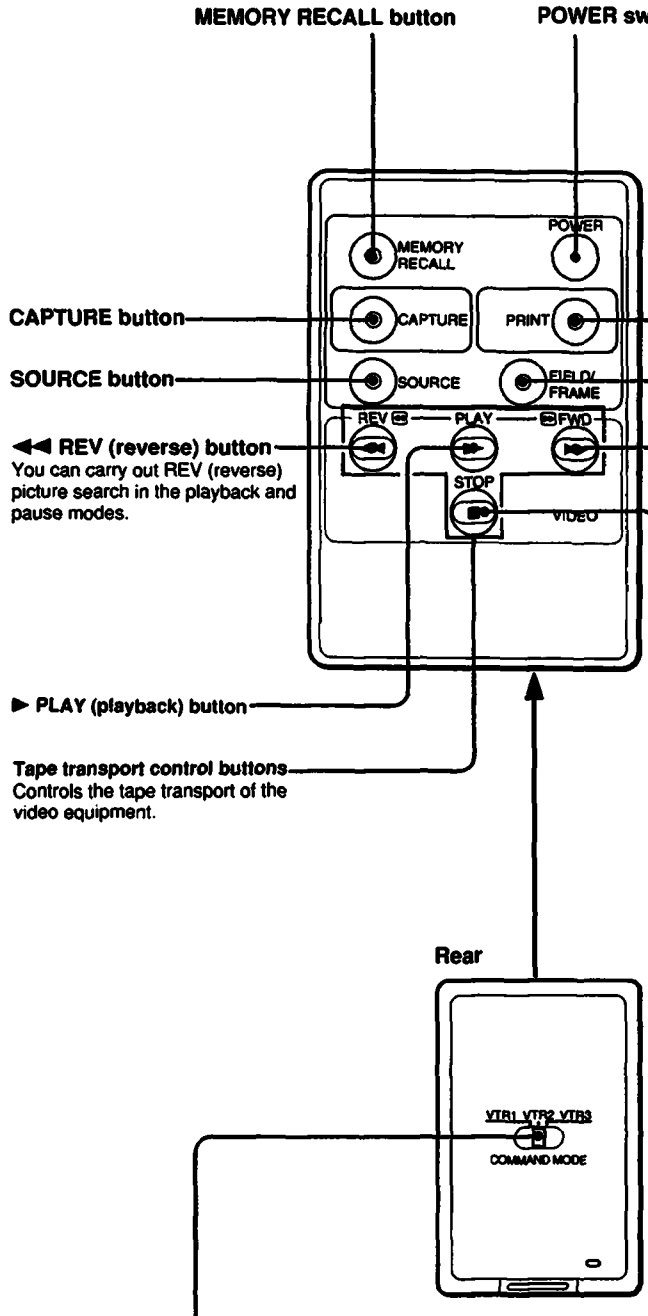
For explanation of the use of each part, refer to the pages indicated in ( ).

Main unit


Rear
Accessory shoe (page 9)
Rear hatch for checking paper jam (page 49)
AC IN jack (page 9)
When the cartridge compartment lid is open
Video print cartridge (page 12)
Lever for removing the cartridge (page 13)
Sliding cover (page 20)
FIELD/FRAME button (page 17)
CAPTURE button (page 16)
SOURCE button (page 18)
PRINT button (page 18)
POWER switch and POWER lamp (pages 9 and 16)
ERROR indicator (page 48)
Remote sensor (page 10)
Paper compartment lid (page 14)
Cartridge compartment lid (page 12)
VIDEO OUTPUT connector (phono type) (page 8)
S VIDEO OUTPUT connector (mini DIN 4-pin type) (page 8)
VIDEO INPUT connector (phono type) (page 8)
S VIDEO INPUT connector (mini DIN 4-pin type) (page 8)
Hook for carrying strap (page 6)
Printout cover (page 14)
When the sliding cover is open
PRINT CANCEL button (page 40)
DISPLAY button (page 22)
MENU (ON/OFF) button (page 20)
MEMORY SELECT button (page 22)
Cursor control buttons (page 20)
TITLE SELECT button (page 36)
TITLE DELETE button (page 36)
EXEC (execute) button (page 20)
MEMORY RECALL button (page 25)
When the printout cover and the paper compartment lid are open
Paper outlet (page 18)
Paper tray (page 14)
Upper hatch for checking paper jam (page 49)

Remote commander

The buttons and switches on the supplied remote commander have the same function as those with the same names on the unit. With the remote commander, you can also control the tape transport of Sony video equipment.


MEMORY RECALL button
POWER switch
MEMORY RECALL
POWER
CAPTURE button
CAPTURE
PRINT
PRINT button
SOURCE button
SOURCE
FIELD/ FRAME
FIELD/FRAME button
REV
PLAY
FWD
◀◀ REV (reverse) button
You can carry out REV (reverse) picture search in the playback and pause modes.
▶▶ FWD (fast forward) button
You can carry out FWD (fast forward) picture search in the playback and pause modes.
STOP
VIDEO
▶ PLAY (playback) button
■ STOP button
Tape transport control buttons
Controls the tape transport of the video equipment.
Rear
VTR1 VTR2 VTR3
COMMAND MODE
COMMAND MODE switch
You can control other Sony video equipment. (If the command mode set in the other Sony video equipment is different from those shown below, select the same command mode as the equipment you want to control.)
VTR 1: Sony Beta VCR
VTR 2: Sony 8mm VCR and camcorder
VTR 3: Sony VHS VCR

Troubleshooting Guide

Error messages

If something wrong occurs in the unit, an error message stating the problem appears in the center of the screen.

Error message	Cause and remedy
Please insert Video Print Cartridge.	• Make sure that the print cartridge is loaded. (page 12) • Use the print cartridge recommended for this printer only. (page 12) • Make sure that the cartridge compartment lid is closed completely.
Please place Video Print Paper in tray.	• Make sure that the print paper is inserted in the paper tray. (page 14) • Make sure that the paper tray is inserted firmly into the place. (page 15)
Please open rear lid and remove jammed paper.	• Open the rear hatch and remove the jammed print paper. If the error message still appears on the screen, turn the power off. In this case, the stored image and various settings in memory will be canceled. (page 49)
Please open upper lid and remove jammed paper.	• Open the upper hatch. Remove the jammed print paper and reinsert the paper tray. If the error message still appears on the screen, turn the power off. In this case, the stored image and various settings in memory will be canceled. (page 49)
Out of ink ribbon please insert new cartridge.	• The ink ribbon has been completely used up. Replace the print cartridge with a new one. (page 13) • The ink ribbon tore. Repair it with the transparent tape.
Print paper and ink ribbon are mismatched.	• Use the print cartridge and the print paper packed in the same carton. (page 12)
Please remove printed paper.	• Too many printouts are left on the paper outlet, which may cause a paper jam. Remove the printouts.
Memory image with [icon].	• Press the MEMORY SELECT button to display [icon] on the screen. Then press the CAPTURE button.
Please wait while printer resets itself.	The temperature inside the unit is not suitable for printing. • If the message appears during printing and the unit suspends printing, wait until the unit start printing again automatically. • If the message appears when you insert the print cartridge, wait until the message disappears from the screen before starting to print.

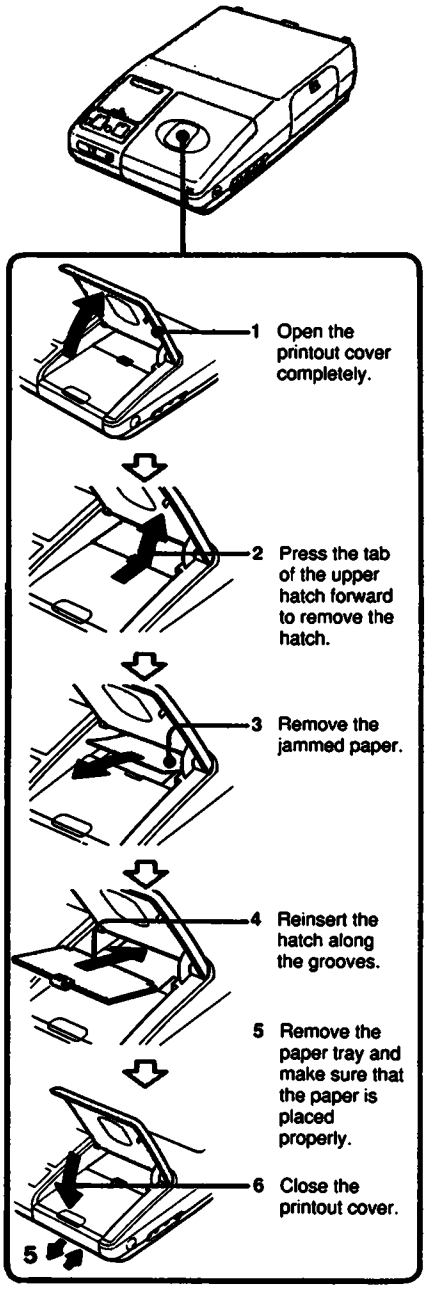
If the ERROR indicator lights up on the front panel
Turn the power off and then on again. If the indicator still lights, contact Sony service facilities for assistance.

If the paper jams

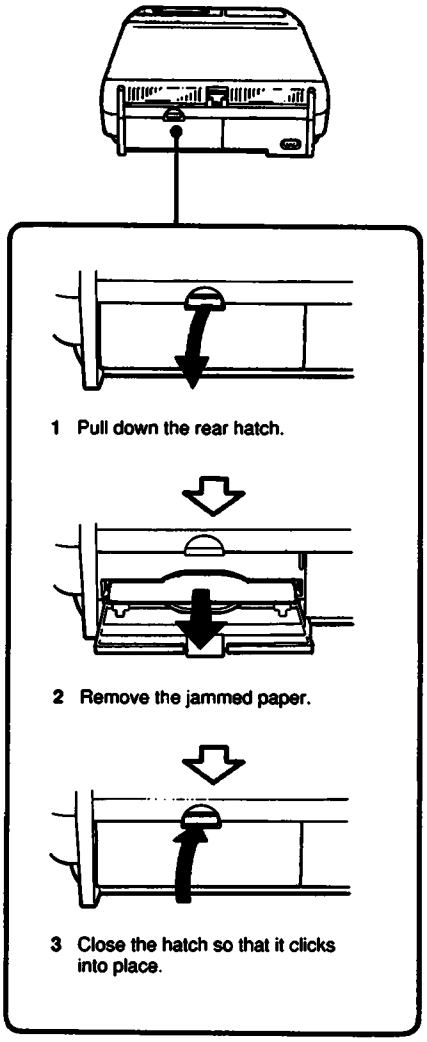
If the print paper jams, the error message appears on the screen and printing stops. Remove the jammed paper according to the following procedures.

Note
If the error message still appears on the screen after having removed the jammed paper, turn the power off and then on again. In this case, the stored image and various settings in memory will be canceled.

If the error message "Please open upper lid and remove jammed paper." appears on the screen
Open the printout cover and remove the upper hatch. Remove the jammed paper. After that, remove the paper tray and make sure that the print paper is placed in the tray properly. Reinsert the tray into the paper compartment correctly.


1 Open the printout cover completely.
2 Press the tab of the upper hatch forward to remove the hatch.
3 Remove the jammed paper.
4 Reinsert the hatch along the grooves.
5 Remove the paper tray and make sure that the paper is placed properly.
6 Close the printout cover.
5

If the error message "Please open rear lid and remove jammed paper." appears on the screen
Pull down the rear hatch and remove the jammed paper.



Specifications

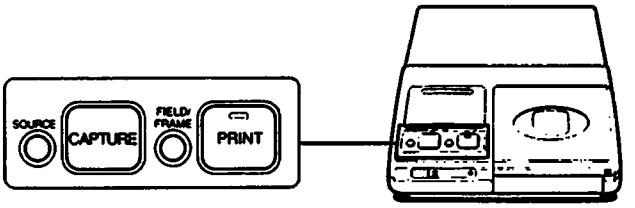
Printing system	Sublimation heat transfer printing
Number of picture elements	448 (V) × 708 (H) dot (for full-size printout)
Printing size	80 (V) × 109 (H) mm (3 1/4 × 4 3/8 inches) (for full-size printout)
Total gradation	256 levels (8 bits each for R, G and B)
Printing time	Approx. 60 seconds per sheet (for regular and sticker print paper)
TV signal	NTSC color system, EIA standard
Input/output connectors	VIDEO (NTSC composite video signal) input Phono connector ×1 1 Vp-p, 75 ohms (unbalanced), sync negative S VIDEO (separate luminance (Y) and chrominance (C) signals) input Mini DIN 4-pin connector ×1, automatically selectable Y: 1 Vp-p 75 ohms (unbalanced), sync negative C: 0.28 Vp-p (color burst) 75 ohms (unbalanced) VIDEO (NTSC composite video signal) output Phono connector ×1 1 Vp-p, 75 ohms (unbalanced), sync negative S VIDEO (separate luminance (Y) and chrominance (C) signals) output Mini DIN 4-pin connector ×1 Y: 1 Vp-p 75 ohms (unbalanced), sync negative C: 0.28 Vp-p (color burst) 75 ohms (unbalanced)
Video Print Cartridge and Video Print Paper	Video Print Cartridge for regular and sticker print paper for use only with PRINTERS bearing the VP trademark. Video Print Paper for use only with PRINTERS bearing the VP trademark (100 × 140 mm (4 × 5 5/8 inches) sheets)
Power requirements	120 V AC, 60 Hz
Power consumption	110 W (when printing), 13 W (when not printing)
Operating temperature	5°C to 35°C (40°F to 95°F)
Operating humidity	20% to 80%
Dimensions	Approx. 262 × 100 × 385 mm (w/h/d) excluding protruding parts (10 3/8 × 4 × 15 1/4 inches)
Mass	Approx. 4.5 kg (9 lb 15 oz)
Accessories supplied	Video Print Pack for trial use (1) Video Print Cartridge (1 cartridge for 25 prints) Regular Print Paper (15 sheets) Sticker Print Paper (10 sheets) Paper tray (1) Remote commander RMT-8A (1) AC power cord (1) Carrying strap (1) Video connecting cable (3 m) (10 feet) (1)

Design and specifications subject to change without notice.

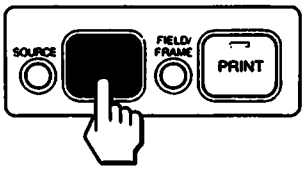
Quick Reference

Setting up

- Connect the TV and the video equipment to the printer.
- Load the video print cartridge and the video print paper.
- Play back the video equipment.

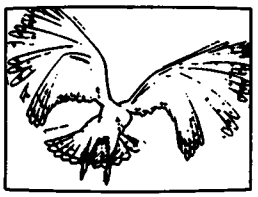


1 When the image you want to print appears, store it in memory.



2 Check if the stored image is blurred or not.

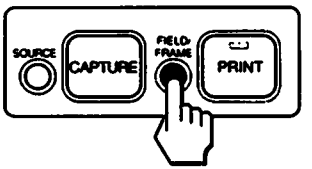
The picture in the FRAME mode



Blurred → **Proceed to step 3.**

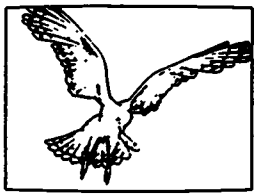
Not blurred → **Proceed to step 4.**

3 Select the FIELD A mode or the FIELD B mode.

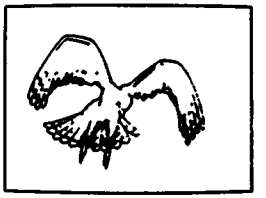


Each time you press the FIELD/FRAME button, the mode changes in the order of FRAME → FIELD A → FIELD B → FRAME. Select "FIELD A" or "FIELD B", checking which mode eliminates the blur most.

The picture in the FIELD A mode



The picture in the FIELD B mode



4 Start printing.